

protein . protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 16:59:46 2000; MasPar time 4.96 Seconds 109.982 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-7 (1-10) from US09150813.pep 84 Description: Perfect Score: Sequence:

1 CADPKQKWVQ 10

179066 segs, 54579741 residues Searched:

PAM 150 Gap 15

Scoring table:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremb19 Database:

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 24.747; Variance 35.072; scale 0.706 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	6.81e-05	6.81e-05	2.19e-03	S	2.39e-02	3.82e-02	3.82e-02	6.09e-02	φ	7	2.41e-01	3.78e-01	9.20e-01	9.20e-01	Η.	1.43e+00	2.20e+00	2.20e+00	, 2.20e+00	3.39e+00	
Description	NEUROTACTIN.	FRACTALKINE.	MPIF-2.	CC CHEMOKINE ST38 PREC	BETA CHEMOKINE EXODUS-	CHEMOKINE EXODUS.	CC CHEMOKINE EXODUS.	LYMPHOTACTIN PRECURSOR	CX3C CHEMOKINE PRECURS	LD78 ALPHA BETA PRECUR	CC CHEMOKINE ABCD-1.	CC CHEMOKINE-1.	RANTES PRECURSOR.	B LYMPHOCYTE CHEMOATIR	IL-10-INDUCIBLE CHEMOK	HYPOTHETICAL 21.4 KD P	BETA CHEMOKINE EXODUS-	SMALL INDUCIBLE CYTOKI	RIBONUCLEOSIDE REDUCTA	ORF K6.	
ΩI	035188	035933	000175	089093	000585	099664	P97884	057411	P78423	014745	088430	093238	043646	055038	015467	083516	900600	009002	084834	098158	
DB	==	11	4	11	4	4	11	13	4	4	Ξ	13	4	1	7	~	1	11	~	14	
Query Match Length	395	395	119	97	134	95	96	97	397	80	92	101	91	109	120	187	133	133	1053	95	
Query Match	95.2	95.2	86.9	84.5	81.0	79.8	79.8	78.6	78.6	76.2	75.0	73.8	71.4	71.4	70.2	70.2	0.69	0.69	0.69	67.9	
Score	80	80	73	7.1	9	67	67	99	99	64	63	62	09	9	59	59	28	58		27	
Result No.		2	e	4	S	ø	7	σ	σ	10	11	12	13	14	15	16	17	18	19	20	

3.39e+00		3.39e+00	٠	7.89e+00	7.89e+00	7.89e+00	7.89e+00	1.20e+01	1.20e+01	1.20e+01	1.20e+01	1.20e+01	1.20e+01	1.20e+01	1.20e+01	1.80e+01	1.80e+01	1.80e+01	1.80e+01	1.80e+01	۲.	۲.		2.70e+01
INTERLEUKIN-8 (FRAGMEN	RESISTANCE GENE HOMOLO	DOWNY MILDEW RESISTANC	SERINE RICH PROTEIN HO	CXC CHEMOKINE PRECURSO	HYPOTHETICAL 16.6 KD P	BETA-GALACTOSIDASE (EC	BETA-GALACTOSIDASE (EC	HI1054 HOMOLOG (FRAGME	ECO Q PROTEIN (FRAGMEN	ORF UL154.	HYPOTHETICAL 53.8 KD P	NPP47 PROTEIN.	TO1D3.3 PROTEIN.	H19M22.1 PROTEIN (FRAG	KIAA0462 PROTEIN (FRAG	MACROPHAGE-DERIVED CHE	ENVELOPE GLYCOPROTEIN	2-HYDROXY-6-OXO-7-METH	C27D8.3 PROTEIN.	RESISTANCE GENE HOMOLO	ö	INSERTION ELEMENT IS61	BETA-GALACTOSIDASE.	PLEXIN 3.
062812	023536	004264	061090	043927	P74671	065737	065736	051136	067634	068409	060646	086395	P90956	061210	075050	000626	040501	P96965	093290	023533	070460	989050	023243	P70208
9	10	10	Ŋ	4	7	10	10	7	14	14	4	7	Ŋ	Ŋ	4	4	14	~	S	10	11	7	10	11
97	192	1361	522	109	145	307	730	172	203	399	475	928	949	1825	2276	93	100	282	982	1422	108	108	852	1872
	٠.		٠.	65.5						64.3		64.3	64.3	64.3	64.3			63.1	63.1	m	٠	61.9	Ξ.	61.9
57	57	57	56	55	22	55	55	54	54	54	54	54	54	54	54	23	23	53	53	53	52	52	52	52
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	36	40	41	42	43	44	45

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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MUS MUSCULUS (MOUSE).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
[1]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN-BALBAC; TISSUE-BRAIN;
ROSSI D., HARDHANN G., COPELAND N., GILBERT D.J., JENKINS N., ZLOTNIK A., BAZAN J.F.;
SUBMITTED (MAR.1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL. 192565; G2459677; -.
PFRAM; PROD048; 118; 1.
SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
NARDELLI B., PIPPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.,
GENTZ R., GAROTTA G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LESSIAUER W.;
"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                    Score 80; DB 11; Length 395;
Pred. No. 6.81e-05;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 73; DB 4; Length 119;
Pred. No. 2.19e-03;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL: AF053313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    089093;
01-NOV-1998 (TREMBLREL 08, CREATED)
01-NOV-1998 (TREMBLREL 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAKLULZ R., GARCIIA
J. EXP. MED. 0:0-0(0).
J. EXP. MED. 0:0-0(0).
EMBL; U85768; 01916252; --
PFAM; PF00048; 118; 1.
TOTTENCE 119 AA; 13119 MW; CDF526F0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                         119 AA.
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04,
                                                                                                                                                                                                                    Query Match
Best Local Similarity 90.0%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                          ULT 3 PRELIMINARY;
000175, 01-501-1997 (TREMBLREL. 04
01-501-1997 (TREMBLREL. 04
01-NOV-1998 (TREMBLREL. 06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8; Conservative
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                                                                                                                                                                                                                                                                                                                               74 CADPKEKWVQ 83
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| CADPKQKWVQ 10
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089093
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-JUL-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHBRIA; PRIMATES;
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EUKARXOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINL; HOMINIDAE; HOMO.
                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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HROMAS R., GRAY P.W., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14.)
NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S.,
NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S.,
NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; HO8320; G2196920; -.
EMBL; AF001979; G2624925; -.
EMBL; AB002409; D1022673; -.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 97400322.
HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                            Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81.0%; Score 68; DB 4; Length 134;
larity 80.0%; Pred. No. 2.39e-02;
Conservative 1; Mismatches 1; Indels
                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. HEDRICK J.A., ZLOTNIK A.; SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                    Score 71; DB 11; Le:
Pred. No. 5.74e-03;
1; Mismatches 0;
 POTENTIAL.
CC CHEMOKINE ST38.
053405BD CRC32;
                                                                                                                                                                                                                                                   134 AA.
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                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
1 27 1
28 97
97 AA; 10826 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03,
                                                                      84.5%;
                                                                                       Best Local Similarity 88.9%;
                                                                                                         8; Conservative
                                                                                                                                                                                                                                                 PRELIMINARY;
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01-NOV-1998 (TREMBLREL.
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                                                                                                                                         75 CADPKONWV 83
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                                                                                                                                                                        1 CADPKOKWV 9
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                                  SEQUENCE
                                                                    Query Match
                                                                                                                                                                                                                             LT 5
000585
000585;
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Q99664
Q99664;
 SIGNAL
                   CHAIN
                                                                                                       Matches
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US-09-150-813-7.rspt

POTENTIAL.

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CHAIN
SEQUENCE
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Q14745
Q14745;
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                                                                                                                                                                                                                                               T 9
P78423
    SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                   Gaps
"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";

J. NEDROIMMUNOL. 0:0-0(1998).

BMBL: 900447; 61899246; -..

EMBL: AF053312; G5551817; -..

PFAM; PF00048; i18; 1.
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0
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-FISHER 344; TISSUE-BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 67; DB 11; Length 96;
Pred. No. 3.82e-02;
0; Mismatches 1; Indels
                                                                                                                                                                           Score 67; DB 4; Length 95; Pred. No. 3.82e-02; 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRIN-SERAGUE-DAWLEY;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-SPLEEN;
ROSSI D.L., BAZAN J.F., ZLOINIK A.;
ROSSI D.L., BAZAN J.F., EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF006742; G2827882; -.
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06, LAST SEQUENCE UPDATE)
06, LAST ANNOTATION UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                    101-MAY-1997 (TREMBLREL. 03, 101-MAY-1997 (TREMBLREL. 03, 01-NOY-1998 (TREMBLREL. 08, CC CHEMOKINE EXODUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 79.8%;
Best Local Similarity 88.9%;
                                                                                                                                                                             Query Match
Best Local Similarity 77.8%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-1998 (TREMBLREL.
01-JUN-1998 (TREMBLREL.
01-JUN-1998 (TREMBLREL.
LYMPHOTACTIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74 CADPROIWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CADPROKWV 9
                                                                                                                                                                                                                                                         73 CANPROTWV 81
                                                                                                                                                                                                                                                                                      1 CADPKQKWV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LESSLAUER W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               057411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T 8
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SECTENCE FROM N.A.
ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRWANN J., MASON T.M.,
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"Homo sapiens Chromosome 15 BAC clone CIT987SK-A-152E5.";
SUBMITTED (JUN-1999) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-BRAIN;
ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K.,
KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BAZAN J. SOO K., ROSSI D., BAZAN C., WANG W., SOO K., ROSSI D., GREAVES D.R., ZLOTNIK A., SCHALL T.J.; "A new class of membrane-bound chemokine with a CX3C motif."; NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                        Length 97;
                                                                        Score 66; DB 13; Length 97;
Pred. No. 6.09e-02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; D63785; D1010501; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                            LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 66; DB 4; Le
Pred. No. 6.09e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CX3C CHEMOKINE.
C8093D7D CRC32;
             LYMPHOTACTIN.
3290101C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80 AA.
                                                                                                                                                                                                                                                                                                 397 AA.
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                                                                                                                                                                                                                                                                                                                                            CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                 PRT;
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CHAIN 25 397 C
SEQUENCE 397 AA; 42202 MW;
1 24 F
25 97 I
97 AA; 11131 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL, U91835; G1899259; -.
EMBL, U84487; G188523; -.
EMBL, ACO04382; G3252821; -.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                     01-MAY-1997 (TREMBLREL. 03, 01-MAY-1997 (TREMBLREL. 03, 01-NOV-1998 (TREMBLREL. 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 77.8%;
                                                                               78.6%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7; Conservative
                                                           Query Match
Rest Local Similarity 70.vv.,
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                          CX3C CHEMOKINE PRECURSOR.
                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE; 97177111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74 CADPKEQWV 82
                                                                                                                                                                    73 CVHPEQKWVQ 82
                                                                                                                                                                                                               1 CADPKQKWVQ 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CADPKQKWV 9
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC CHEMOKINE-1.
CYPRINUS CARPIO (COMMON CARP).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; CYPRININAE; CYPRINUS.
                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-LIVER;
MEDLINE; 9835331.
SCHANIEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C., SHANIEL C., PARDALI E., ANDERSSON J., MELCHERS F., ROLINK A.G., SIDERAS P.;
"Activated murine B lymphocytes and dendritic cells produce a novel C chemokine which acts selectively on activated T cells.";
EMBL; AF022505; G3378016; -.
SEOUENCE 92 AA: 10302 MW; BC7219A0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                              Score 64; DB 4; Length 80;
Pred. No. 1.53e-01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 75.0%; Score 63; DB 11; Length 92; Best Local Similarity 77.8%; Pred. No. 2.41e-01; Matches 7; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match

Dest Local Similarity 66.7%; Pred. No. 3.78e-01;

Matches 6; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AB010469; D1032417; -..
SEQUENCE 101 AA; 11266 MW; 9CFBD540 CRC32;
                                                                                                                                                                                                                                                                                 01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1998 (TREWBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                         POTENTIAL.
LD78 ALPHA BETA.
                                                                                                 3F87F1C6 CRC32;
                                                                                                                                                                                                                                                                92 AA.
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
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                                            1
16
>80
80
8857 MW;
                                                                                                                    Query Match 76.2%;
Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                          67 CADPSEEWVQ 76
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                              80 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76 CADPROVWV 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CADPKQKWV 9
                                                                               NON_TER
SEQUENCE
                                        NON_TER
SIGNAL
                                                                                                                                                                                                                                           LT 11
088430
088430;
                              SIGNAL.
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093238
093238;
                                                                     CHAIN
                                                                                                                                                                                                                                             RESULT
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DR DR KW KW FT FT FT FT SQ
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01-JUN-1998 (TREMBLEREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLEREL. 08, LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLEREL. 08, LAST ANNOTATION UPDATE)
B LYMPHOCYTE CHEMOATTRACTANT BLC.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "A B-cell-homing chemokine made in lymphoid follicles activates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Structure of a region of 181 kb containing five CC chemokine genes.";
genes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 60; DB 4; Length 91; Pred. No. 9.20e-01; "inmatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-C57BL/6J;
MEDLINE: 98146056.
GUNN M.D., NGO V.N., ANSEL K.M., EKLAND E.H., CYSTER J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 60; DB 11; Length 109;
Pred. No. 9.20e-01;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                  01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
EMBL; AF044196; G2911374; -.
SEQUENCE 109 AA; 11927 MW; BB6CCC22 CRC32;
                                                                                                                                                               91 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CF404FAD CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                               PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE 91 AA; 9990 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 60.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
71.4%;
Best Local Similarity 50.0%;
Matches 5; Conservative
                                                                                                                                                       PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
  74 CSDPKLRWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 CANPEKKWVR 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                RANTES PRECURSOR.
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1 CADPKQKWVQ 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOMIYAMA H.;
                                                                                                                            LT 13
043646
043646;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LT 14
055038
055038;
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Gaps

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EXCUENCE FROM N.A.

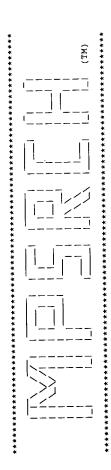
SEQUENCE FROM N.A.

MEDLINE; 98308096.

A YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR., YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR., YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR., YOUN B.S., ZHANG S., BROXMEY S., BROXMEY S., TO THE CONTROL OF THE MENOCYTE CHEMOALINE, With myelosuppressive monocyte chemoattractant human CC chemokine, With myelosuppressive activity of the State of the Common Comm
                                                                                                                                                                                                           ILINCK OR SCYAI6.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=LIVER;
SHOUDAL K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T.,
YOSHIE O., NOMITAMA H.;
BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NOMIYAMA H.; "Structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 70.2%; Score 59; DB 4; Length 120; Local Similarity 50.0%; Pred. No. 1.43e+00; es 5; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                               HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
LT 15 PRELIMINARY; PRT; 120 AA.
015467 015467 05.05.05.05.05.05.01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-JAN-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
11-10-INDUCIBLE CHEMOKINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE 120 AA; 13600 MW; A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76 CINPNDDWVQ 85
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| CADPKQKWVQ 10
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SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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Search completed: Fri Feb $\,4\,\,17\,:00\,:18\,\,2000$ Job time : 32 secs.

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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:04:22 2000; MasPar time 5.13 Seconds 127.601 Million cell updates/sec MPsrch_pp

Tabular output not generated.

Run on:

>US-09-150-813-38 (1-12) from US09150813.pep 102 Title: Description: Perfect Score: Sequence:

1 QVCIDPKLKWIQ 12

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

sptremb19 Database:

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 1:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 26.040; Variance 34.545; scale 0.754

Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Pred. No.	1.63e-02	1.63e-02	4.32e-02	6.99e-02	1.13e-01	1.13e-01	1.13e-01	2.89e-01	2.89e-01	4.61e-01	4.61e-01	4.61e-01	7.30e-01	1.15e+00	1.81e+00	1.81e+00	2.83e+00	2.83e+00	2.83e+00	2 83A+OD	70.00.7
Description	INTERLEUKIN-8 (FRAGMEN	B LYMPHOCYTE CHEMOATTR	CXC CHEMOKINE PRECURSO	CC CHEMOKINE-1.	LYMPHOTACTIN PRECURSOR	FRACTALKINE.		LD78 ALPHA BETA PRECUR	YUP8H12R.20.	RANTES PRECURSOR.	ORF31.	ECO Q PROTEIN (FRAGMEN	CC CHEMOKINE ST38 PREC	CHROMOSOME IV COSMID 9	MACROPHAGE-DERIVED CHE	MPIF-2.	CHROMOSOME XII COSMID	RECEPTOR TYROSINE KINA	PROHORMONE CONVERTASE	GO KEEDOUG KOOG	PC6A PROTEASE.
ID	062812	055038	043927	093238	057411	035933	035188	014745	064533	043646	036474	067634	089093	006640	000626	000175	006151	076167	013527	0 0	092824
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Query Match Length	76	109	109	101	97	395	395	80	1325	91	129	203	97	478	66	119	75.0	9 9 9	0 0	0 0	915
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4.40e+00 4.40e+00 4.40e+00 4.40e+00	4.40e+00 4.40e+00 6.80e+00	6.80e+00 1.05e+01 1.05e+01	1.05e+01 1.05e+01	1.60e+01 1.60e+01 1.60e+01	1.60e+01 1.60e+01 1.60e+01	1.60e+01 1.60e+01 1.60e+01	1.60e+01 1.60e+01 1.60e+01
ORF K6. CHEMOKINE EXODUS. CC CHEMOKINE EXODUS. IL-10-INDUCIBLE CHEMOK HPTA CHEMOKINE EXODUS-	HYPOTHETICAL 37.4 KD P PUTATIVE REVERSE TRANS K60 PROTEIN PRECURSOR.	RNA POLYMERASE. LFCA-1 PROTEIN PRECURS	POSASE-L HETICAL	SNAIL HOMOLOG. HYPOTHETICAL 16.8 KD P HAIRY ROOT 2.	CO5D2.8 PROTEIN. 337AA LONG HYPOTHETICA HYPOTHETICAL 37.6 KD P	44	T12A7.5 PROTEIN. MITOGEN-ACTIVATED KINA ASK1.
Q98158 Q99664 P97884 O15467	082276 082276 073912	085431 093442 014949	Q56249 Q56249 Q25799	002426 085917 049197	045136 058840 049338	04488	Q12123 Q17904 Q99683 Q99461
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ALIGNMENTS

BRIA;	0; Gaps 0;	EUTHERIA; RODENTIA;
1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DAIA BANKS. BEMBL, AF062377; G312673; SEQUENCE 97 AA; 10742 MW; 00396FBF CRC32; SEQUENCE 97 AA; 10742 MW; 00396FBF CRC32; TY MATCh 67.6%; Score 69; DB 6; Length 97; t Local Similarity 50.0%; Pred. No. 1.63e-02; ches 6; Conservative 4; Mismatches 2; Indels 75 EVCLNPHTKWVQ 86 1 1:: 1 QVCIDPKLKWIQ 12	109 AA. DENCE UPDATE) NOTATION UPDATE) BRATA; MAMMALIA;
L. 07, CREATED) L. 07, CREATED) L. 07, LAST SEQ SL. 07, LAST ANN STATE HORDATA; VERTEE NAE; EQUUS. TARRESUE;	10 EMBL/GENBANK/ 26973;	PRELIMINARY; PRT; 109 255038; 01-500-100-1998 (TREMBLREL. 06, CREATED) 01-100-1998 (TREMBLREL. 06, LAST SEOUENC 01-NOV-1998 (TREMBLREL. 06, LAST SEOUENC 01-NOV-1998 (TREMBLREL. 06, LAST ANNOTAT MUS MUSCULUS (MOUSE). EUKARYOTA, METAZOA: CHORDATA; VERTEBRATA SCIURCONATHI; MURIDAE; MURINAE; MUS. [1] SEOUENCE FROM N.A. SEDUELNE; 98146056. GUNN M.D., NGO V.N., ANSEL K.M., EKLAND
1 DRELIMINARY; 1 1 0.02812 DRELIMINARY; 1 0.02812 D. 0.	TTED (APR-1998) TO EX AF062377; G3126973; BR 97 A3; 10742 10	PRELIMINARY; 925038; 01-JUN-1998 (TREMBLREL. 01-JUN-1998 (TREMBLREL. 01-NV-1998 (TREMBLAE.) 01-NV-1998 (TREMBLEL.)
770	RL SUBMITTED BR EMBL, AFP SQ SEQUENCE QUETY MATCH BEST LOCAL MATCHES DD 75 EVC	RESULT 2 1D 055038 1D 01-010N-1998 DT 01-JUN-1998 DT 01-JUN-1998 DE BLYMPHOCYTE OS MUS MUSCULUS OC EUKARYOTA; M CC SCIURGONATHI RN [1] RP SEQUENCE FRO RC STRAIN-C57BL RX MEDLINE; 981 RA GUNN M.D., N

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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LEGLER D.F., LOGISCHER M., STUBER ROOS R., CLARK-LEWIS I.,
BAGGIOLINI M., MOSER B.;
B cell-attracting chemokine 1, a human CXC chemokine expressed in
Iymphoid tissues, selectively attracts B lymphocytes via
BLRI/CXCR5.;
                      "A B-cell-homing chemokine made in lymphoid follicles activates Burkit's lymphona receptor-1."; NATURE 391:799-803(1998) BMBL; AF044196; G2911374; SEQUENCE 109 AA: 11927 MW; BB6CCC22 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "A B-cell.homing chemokine made in lymphoid follicles activates Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
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0
                                                                                                                                                                                                          Length 109;
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                                                                                                                                                                                      // Match
Local Similarity 45.5%; Pred. No. 1.63e-02;
1es 5; Conservative 5; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAPOLITANO M., SPINETTI G., GAETANO C., CAPOGROSSI C.M.; SUBMITTED (OCT.1927) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AJ002211; 12149325; ... EMBL; AF044211; CAPOGROSSI C.M.; EMBL; AF044211; CAPOGROSSI C.M.; EMBL; AF044211; CAPOGROSSI C.M.; CAPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65.7%; Score 67; DB 4; Length 109; 63.6%; Pred. No. 4.32e-02; Ative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE-1.
CYPRINUS CARPIO (COMMON CARP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN 23 109 POTENTIAL.
SEQUENCE 109 AA; 12664 MW; BE5A46BC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          109 AA
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01-JUN-1998 (TREMBLREL. 06,
01-NOV-1998 (TREMBLREL. 08,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7; Conservative
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                                                                                                                                                                                                                                                                                                  74 ICVNPRAKWLQ 84
                                                                                                                                                                                                                                                                                                                                                      2 VCIDPKLKWIQ 12
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WILLIAMS L.T.;
                                                                                                                                                                                              Query Match
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043927
0425
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; CYPRININAE; CYPRINUS.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MOS.
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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0
                                                                                                                                   FUJIKI K., NAKAO M., SHIN D., YANO T., "CDNA cloning of a carp CC chemokine homologous to mammalian
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057411
077412
057411
01-UN-1998 (TREMBLREL. 06, CREATED)
01-UN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-UN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-UN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
01-UN-1998 (TREMBLREL.)
01-UN-1998 (TREMBLREL.)
02-UN-1998 (TREMBLREL.)
03-UN-1998 (TREMBLREL.)
04-UN-1998 (TREMBLREL.)
05-UN-1998 (TREMBLREL.)
06-UN-1998 
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STRAIN-BALB/C; TISSUE-BRAIN;
ROSSI D., HARDINAN G., COPELAND N., GILBERT D.J., JENKINS N.,
ZLOTNIK A., BAZAN J.F.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, 1922-565; G245-9677; -
PFAN; PFOO048; il8; 1.
SEQUENCE 395 AA; 42040 MW; 3997All3 CRC32;
                                                                                                                                                                                                                                                                                                                                             Length 101;
                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 63.7%; Score 65; DB 13; Length 97; Local Similarity 41.7%; Pred. No. 1.13e-01; es 5; Conservative 4; Mismatches 3; Indels
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                                                                                                                                                                                                             SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AB010469; D1032417; -
SEQUENCE 101 Aa; 11266 Mw; 9CFBD540 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-SPLEEN;
ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
SIGNAL, AF006742; G2827882; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-57N-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                  Score 66; DB 13; I
Pred. No. 6.99e-02;
2; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 63.7%; Score 65; DB 11; I
Best Local Similarity 70.0%; Pred. No. 1.13e-01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LYMPHOTACTIN.
3290101C CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POTENTIAL
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                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 66.7%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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1 QVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71 RICVHPEQKWVQ 82
                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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25
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035933
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PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-CV. COLUMBIA;
THEOLOGIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=CV. COLUMBIA;
THEOLOGIS A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN=CV. COLUMBIA;
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN=CV. COLUMBIA;
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SEQUENCE FROM N.A.
STRAIN-CV. COLUMBIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1076 CIDPDLIWI 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
1 OVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 CIDPKLKWI 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RANTES PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THEOLOGIS A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THEOLOGIS A.;
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043646
043646;
                                                                                    LT 9
064533
064533;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
           ö
                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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PAN Y. CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J.,
PAN Y., CLARE L., LOUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J.,
GUTIERREZ-RAMOS J.C., GEARING D.;
"Neutotactin, a membrane-anchored chemokine upregulated in brain
"Neutotactin, a membrane-anchored chemokine upregulated in brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
               Gaps
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Pred. No. 1.13e-01;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 63; DB 4; Length 80;
Pred. No. 2.89e-01;
1; Mismatches 4; Indels
               2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; D63785; D1010501; -
PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                       01-JAN-1998 (TREMBLREL. 05, CREATED) 01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE) 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE) NEUROTACTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NATURE 387:611-617(1997).
EMBL; AF010586; G2317698; -.
MGD; MGI:1097153; SCYDI.
PFAM; PF00048; 118:1.
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
LD78 ALPHA BETA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80 AA
               1; Mismatches
                                                                                                                                                                                    395 AA
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                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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80 AA; 8857 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guery Match
Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Watch 63.7%;
Local Similarity 70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7; Conservative
                      7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
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280
                                                                                                                                                                                        PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 CIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                              74 CADPKEKWVQ 83
                                                                                        3 CIDPKLKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation
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SEQUENCE
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SIGNAL
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Q14745
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035188;
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                            Matches
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                                                                                                                                                                        ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).
BUKARYOTA; VIRIDIPLANTAE; STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
BUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS; ROSIDAE;
CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                    THEOLOGIS A., VYSOTSKAIA V.S., OSBORNE B.I., SCHWARTZ J.R., FEDERSPIEL N.A., KWAN A., TORIUMI M., YU G., OJI, O, ARAUJO R., CHUNG B., DEWER K., DIETRICH F., ECKER J.R., MARZIALI A., OEFNER P., DAVIS R.W.;
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Best Local Similarity 77.8%; Pred. No. 2.89e-01;
Matches 7; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (MAY-1998) TO EMBL,/GENBANK/DDBJ DATA BANKS.
EMBL; AC002986; G3152582; -
SEQUENCE 1325 AA; 148916 MW; 444300A9 CRC32;
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LAST ANNOTATION UPDATE)
                                          01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91 AA.
PRT; 1325 AA.
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01-JUN-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
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"DNA sequence and secondary structures of the large subunit rRNA coding regions and its two class I introns of mitochondrial DNA from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CUMMINGS D.C., DOMENICO J.M., NELSON J., SOGIN M.L.; "DNA sequence, structure, and phylogenetic relationship of the small subunit rRNA coding region of mitochondrial DNA from Podospora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TURKER M.S., DOMENICO J.M., CUMMINGS D.J.;
"Excision-amplification of mitochondrial DNA during senescence in Podospora anserina. A potential role for an 11 base-pair consensus Sequence in the excision process.";
J. MOL. BIOL. 198:171-185(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CUMMINGS D.J., DOMENICO J.M., MICHEL F., "DNA sequence and organization of the mitochondrial ND1 gene from Podospora anserina: analysis of alternate splice sites."; CURR. GENET. 14:253-264(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CUMMINGS D.J., DOMENICO J.M.;
"Sequence analysis of mitochondrial DNA from Podospora anserina.
Pervasiveness of a class I intron in three separate genes.";
J. MoL. BIOL. 204:815-839(1988).
          Structure of a region of 181 kb containing five CC chemokine
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                                                                                                                                                                                                                                                                                                                                                                                                                   EUKARYOTA; FUNGI; ASCONYCOTA; EUASCOMYCETES; PYRENOMYCETES;
                                                                                                                                                                   Score 62; DB 4; Length 91;
Pred. No. 4.61e-01;
3; Mismatches 3; Indels
                                     SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                      LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                               RANTES.
CF404FAD CRC32;
                                                  EMBL; AF043341; G2905632; -
EMBL; AF088219; G3719366; -
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                               POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                              SORDARIALES; SORDARIACEAE; PODOSPORA.
                                                                                                                                                                                                                                                                                                                                        CREATED)
                                                                                                                                                                                                                                                                                                                PRT;
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                                                                                                            1 23
24 91
91 AA; 9990 MW;
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01,
08,
                                                                                                                                                                                Local Similarity 50.0%;
                                                                                                                                                                      60.88;
                                                                                                                                                                                               6; Conservative
                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                  01-NOV-1996 (TREMBLREL.
01-NOV-1996 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                       71 OVCANPEKKWVR 82
                                                                                                                                                                                                                                                1 QVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                        PODOSPORA ANSERINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89063443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                       MITOCHONDRION
NOMIYAMA H.;
                                                                                                                                       SEQUENCE
                                                                                                                                                                   Query Match
                                                                                             SIGNAL.
                                                                                                                                                                                                                                                                                                      Q36474
Q36474;
                                                                                                            SIGNAL
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"DNA sequence analysis of the 24.5 kilobase pair cytochrome oxidase subunit I mitochondrial gene from Podospora anserina: a gene with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-GA;
MEDLINE; 96074534.
PENG Q., ZENG M., BHUIYAN Z.A., UBUKATA E., TANAKA A., NONOYAMA M.,
SHIRAZI Y.;
'Isolation and characterization of Marek's disease virus (MDV) cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIINE; 90291512.
CUMMINGS D.J., MCNRLLY K.L., DOMENICO J.M., MATSUURA E.T.;
"The complete DNA sequence of the mitochondrial genome of Podospora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
CUMMINGS D.J., MACNEIL I.A., DOMENICO J., MATSUURA E.T.;
"Excision-amplification of mitochondrial DNA during senescence in
Podospora anserina. DNA sequence analysis of three unique
                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 90204556.
CUMMINGS D.J., MICHEL F., DOMENICO J.M., MCNALLY K.L.;
Mitochondrial DNA sequence analysis of the cytochrome oxidase subunit II gene from Podospora anserina. A group IA intron with a putative alternative splice site.";
J. Mol. BIOL. 212:287-294(1990).
                                                                                                                                                                                                                                                                                                                         CUMMINGS D.T., MICHEL F., DOMENICO J.M., MCNALLY K.L.; "DNA sequence analysis of the mitochondrial ND4L-ND5 gene complex from Podospora anserina. Duplication of the ND4L gene within its
                                                                                                              CUMMINGS D.J., MICHEL F., MCNALLY K.L.;
"DNA sequence analysis of the apocytochrome b gene of Podospora anserina: a new family of intronic open reading frame.";
CURR. GENET. 16:407-418(1989).
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Pred. No. 4.61e-01;
1; Mismatches 2; Indels
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ALPHAHERPESVIRINAE; VARICELLOVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129 AA; 14664 MW; 6E193901 CRC32;
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                                                       MOL. BIOL. 185:659-680(1985).
                                                                                                                                                                                                                                                                                                                                                                               J. MOL. BIOL. 212:269-286(1990).
                                                                                                                                                                                                                                                                   CURR. GENET. 16:381-406(1989).
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EMBL; X55026; G578922; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1996 (TREMBLREL. 01,
01-NOV-1996 (TREMBLREL. 01,
01-NOV-1998 (TREMBLREL. 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60.8%;
70.0%;
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GALLID HERPESVIRUS TYPE 1
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                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                    90124723
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                                                                                                    MEDLINE;
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SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
SUCHSTON M., ANDREWS S., BRINKMAN R., COOPER J., DING H., DU Z.,
FAVELLO A., FULTON L., GATTUNG S., GRECO T., KIRSTEN J., KUCABA T.,
HALLSWORTH K., HAWKINS J., HILLIER L., JIER M., JOHNSON D.,
JOHNSTON L., LANGSTON Y., LATREILLE P., LE T., MARDIS E., MENEZES S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
mapping to the BanHI-12, BanHI-Q2, and BanHI-L fragments of the MDV genome from lymphoblastoid cells transformed and persistently infected with MDV."; VIROLOGY 213:590-599(1995).
EMBL, 034966; G1185444; -.
BYEL, PRO0048, il8: 1.
NON_TER
                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SACCHAROMYCES CEREVISIAE (BAKER'S YEAST).
EUKARYOTA; FUNGI; ASCOMYCOTA; HEMIASCOMYCETES; SACCHAROMYCETALES;
SACCHAROMYCETACEAE; SACCHAROMYCES.
                                                                                                                                                                                                                                                                                                                                               LESSLAUER W.;
"A novel rat Cc chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
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UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 61; DB 11; Length 97;
Pred. No. 7.30e-01;
2; Mismatches 2; Indels
                                                                                                Score 62; DB 14; Length 203;
Pred. No. 4.61e-01;
2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 SUBMITĪED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; APO53313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                        01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHEMOKINE ST38.
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                                                                           SEQUENCE 203 AA; 23132 MW; 887D04C3 CRC32;
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CHAIN 28 97
SEQUENCE 97 AA; 10826 MW;
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Best Local Similarity 60.0%;
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                                                                                                   60.8%;
Local Similarity 54.5%;
Les 6; Conservative
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                                                                                                                                                                                                                                                                                 MUS MUSCULUS (MOUSE).
                                                                                                                                             145 VCVDPEAPWVQ 155
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Q06640
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089093;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M., ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U83137; G193189; G2062425; --
EMBL; D63239; G2062425; --
EMBL, AC004382; G3252820; --
EMBL; AC004382; G3153820; --
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                         VAUDIN M.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
MILLER N., NHAN M., PAULEY A., PELUSO D., RIFKEN L., RILES L.,
TAICH A., TREVASKIS E., VIGNATI D., WILCOX L., WOHLDMAN P., VP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
GODISKA R., CHANTRY D., RAPORT C.J., SOZZANI S., ALLAVENA P.
MANDOVANI A., GRAY P.W.;
J. RXP. MED. 185:0-0(0).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL. MACROPHAGE-DERIVED CHEMOKINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 59; DB 4; Length 93;
Pred. No. 1.81e+00;
5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                        JIA Y., CHERRY J.M.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U28374; G849223;
                                                       WILSON R., WATERSTON R.;
SUBMITTED (JUN-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                 SUBMITTED (JUN-1995) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                            WATERSTON R.:
SUBMITTED (JUN-1995) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 000626;
01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     58.8%; Score 60; DB 3; Lk
55.6%; Pred. No. 1.15e+00;
ative 2; Mismatches 2.
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                                                                                                                                                                                                                                                                                                                                                                                                          478 AA; 54436 MW; 380C8ED7 CRC32;
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MDC OR A-152E5.1.
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36.4%;
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les 5; Conservative
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Search completed: Fri Feb 4 17:05:18 2000 Job time : 56 secs.

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:10:08 2000; MasPar time 5.11 Seconds 128.223 Million cell updates/sec Tabular output not generated. Run on:

>US-09-150-813-40 (1-12) from US09150813.pep 99 Description: Perfect Score: Sequence:

1 ELCLDPKENWVQ 12

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 1:sp_archeare 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus sptremb19 Database:

Mean 25.761; Variance 34.141; scale 0.755 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Result No.	Score	Query Match	Query Match Length 1	DB	DI	Description	pred. No.
;			124	! <	000585	BETA CHEMOKINE EXODUS-	1.31e-04
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+ L	1.7	71.7	305	11	035188	NEUROTACTIN.	4.77e-03
י ר	- 4		47	عا	062812	INTERLEUKIN-8 (FRAGMEN	1.29e-02
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11	6.5	65.7	104	13	073912	Ked PROFEIN PRECURSOR.	20.00
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51	000	0.00	, ,	2 5	504005	1-AMINOCYCLOPROPANE 1-	2.34e-01
14	50	0.00	* "	9 6	20070	DIMPATIVE DISEASE RESIS	3.75e-01
15	62	9.79	9CT	2	0.0400	TRUE GENERAL GENERAL CANADA	5 96p-01
16	61	61.6	176	-	029296	CONSERVED HIPOIDELLOND	
17	9	9 09	92	11	088430	CC CHEMOKINE ABCD-1.	
1 -	9 6		101	7	093442	LFCA-1 PROTEIN PRECURS	
9 6	8 6				043927	CXC CHEMOKINE PRECURSO	
19	9	0.00		* :	100	SORGIOGICA MITHORITAGE	1 496+0(
20	59	59.6	97	7	057411	LIMPHOIACILM FINESTON	

73 ELCADPKELWVQ 84 ||| ||| ||| ||| 1 ELCLDPKENWVQ 12

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1.49e+00	1.49e+00	007070		٠	2.34e+00	2.34e+00	2.34e+00			000000000000000000000000000000000000000	3.00	3.65e+00	3.65e+00	5.66e+00	00+033	00-100-0	٠	5.66e+00	5 660+00		٠	٠	٠	2.66e+00		00+099	00.00	•	0.006+00
MUTY HOMOLOG.	TI12 RECEPTOR BETA2.		ORF Kb.	B LYMPHOCYTE CHEMOATTR	ECO O PROTEIN (FRAGMEN	SERINE RICH PROTEIN HO	FACT MVBD-C	CONTRACTOR EXORIG	CREMONINE EXCESS:	CC CHEMOKINE EAUDUS.	1 - AMINOCYCLOPROPANE - CA	NONSTRUCTURAL PROTEIN	RNA POLYMERASE.	1 - NATION OF COMPANE - 1 -			STRAIN LWVRT 60-1	(212	Phase.	1-AMINOCYCLOPROPANETI	(1	IKB KINASE ALPHA SUBUN	IKK-A KINASE.	CIMILAR TO RDS-2 DISEA	2 11	TIF9.20.			KIAA0292 (FRAGMENT).
015830	20000	000660	098158	055038	067634	061000	1000	Q14324	099664	P97884	042917	089278	0.054.31	1000	Q41034	000626	77745	1 0	069755	043813	023317	014666	015111	100	07/770	064789	026155	088282	014528
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7.2	1 (208	95	109	203	100	770	1142	95	96	365	1777	0.00	6767	89	66	0 7 1) t	210	490	719	745	7/1	9 6	883	925	1089	1130	1716
9	0 10	59.6	58.6	ď			0.0	58.6	57.6	57.6	77.6	, ,		0.70	26.6	25.6		000	26.6	56.6	2				ö	ŝ	56.6	٠	é
Ċ	ה ה	50	23	a L	ם ח	0 0	S S	28	57	57	7.5	. [) i	٦/	26	Ų.) (90	20	3	ייי	ט ער	יו	00	26	56	26	ייי	26
i	17	22	23	2	7 0	67	56	27	28	50		2 6	31	32	CT.	100	* 1	35	36	2.7	. 0	0 0	n •	0.44	41	4.2	43	7 7	

								0;
		PRIMATES;				Š		Gaps
				kine		AKAGI		0;
		OTHER)	·:	chemo		Α .		th 134; Indels
	(TE)	IA; E	SYER H	beta	BANKS	ANPAA O.; BANKS		eng;
ڼړ	JPDATE N UPDA	MAMMAI	BROXMEYER H.; DATA BANKS.	a novel beta chemokine	DATA	, RID OSHIE DATA	RC32;	0
134 AA.	ED) SEQUENCE UPDATE) ANNOTATION UPDATE)	BETA CHEMOKINE EXODUS-2. HOMO SAPIENS (HUMAN) EUKRAKOTA; METAZOA: CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; EORARRHINI; HOMINIDAE; HOMO.		of a	5(3) SEQUENCE FROM N.A. HEDRICK J.A., ZLOTNIK A.; SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS	14) NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAIZAKI M., NOMIYAMA H., YOSHIE O.; SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U88320; G196920; - EMBL; AF001979; G2624925; EMBL; AP001979; D1022673;	FE86A239 CRC32;	Score 78; DB 4; L Pred. No. 1.31e-04; 0; Mismatches 2
PRT;	CREATED) LAST SEQU LAST ANNO	ERTEBF	, FIFF NBANK,	ation nes."	CNBANK	, KUS IYAMA ENBANK	FE86A	core 78 red. No 0; Mis
Ы		TA; V.	ISZ M. IBL/GE	cteriz cystei (1997)	MBL/GE	IMA K. , NOM] MBL/GI	MW;	
ARY;	SL. 04, SL. 04, SL. 08,	S-2. CHORDA E; HOM	, KLEN TO EN	K A.; charae rved e	K A.;	A. HIESH AKIZAKI M. 1997) TO E 2196920; - G2624925; D1022673;	1. 14646 MW;	78.8%; larity 83.3%; Conservative
PRELIMINARY;	(TREMBLREL. (TREMBLREL. (TREMBLREL.	EXODUS UMAN) ZOA; (I.A. (AY P. 1997)	N.A. 322. ZLOTNI n and conse 9:1589	N.A. ZLOTNIK A.; 7-1997) TO E	N.A. I T., KAKIZA -1997) G21965 ; G264; ; D105;	48; 118; 134 AA;	rity
PRE		BETA CHEMOKINE EXODUS-2. HOMO SAPIENS (HUMAN). EUKRAYOTA; METALOA; CHORDATA CATARRHINI; HOMINIDAE; HOMO.	[1] SEQUENCE FROM N.A. HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ	Left SEQUENCE FROM N.A. MEDLINE; 97400322. HEDRICK J.A., ZLOTNIK A.; "Identification and characterization of containing six conserved cysteines."; J. IMMUNOL. 159:1589-1593(1997).	[3] SEQUENCE FROM N.A. HEDRICK J.A., ZLOT SUBMITTED (MAY-199	SEQUENCE FROM N.A. NAGIRA M., IMAI T., HIE NISHIMURA M., KAKIZAKI SUBMITTED (AUG-1997) TO EMBL, UR8320; G219952, EMBL, AF001979; G262492 EMBL, AB002409; D102267	PFAM; PF00048; SEQUENCE 134	Simila 10; C
8 2	000585; 01-JUL-1997 01-JUL-1997 01-NOV-1998	CHEMC SAPIN RYOTA RRHIN	ENCE INS R.	SEQUENCE MEDLINE; HEDRICK J "Identifi Containin	[3] SEQUENCE FROM HEDRICK J.A., SUBMITTED (MAY	14) SECUENCE F NAGIRA M., NAGIRA M., SUBMITTED EMBL; U883 EMBL; AF00	PFAM; PF(SEQUENCE	Match ocal
JLT 1 000585	0005 01-4 01-4	BETA HOMO EUKA CATA	SEQU HRON SUBN	SEOG MEDI HEDI "Ide cont	SEQUEDI SUBI	(4) SEQUEN NAGIRA NISHIN SUBMII EMBL; EMBL;	PFA	Query Match Best Local Similarity Matches 10; Conser
RESULT ID O	A T T	25 S S S	RN RA RL	RP RX RA RT RT	RR RP	RA RA PP	SO	

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                                                                                                      MOS MOSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-THYMUS;
TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A.,
COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A., DORF M.E.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                HROMAS R., KIM. C.H., KLEMSZ M., KRATHWOHL M., FIFE K., COOPER S., SCHNIZLEIN-BICK C., BROXMEYER H.E., "Isolation and characterization of Exodus-2, a novel C-c chemokine with a unique 37-amino acid carboxyl-terminal extension.";
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"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                           Score 72; DB 11; Length 133;
Pred. No. 2.88e-03;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                       SUBMITTED ((JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U88322; G3169697; -. MGD; MGI:1097677; SCYA21. PFAM; PFO0048; 118; 1. SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                     01-JUL-1997 (TREMBLREL. 04, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL. AF006637; G2209189; --
EMBL. AF01980; G2624927; --
MGD: MGI:1097677; SCYA11.
PFAM; PF00048; i18; 1
SEQUENCE 133 AA; 14558 MW; C0532523 CRC32;
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
SMALL INDUCIBLE CYTOKINE A21 (TCA4).
                    133 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133 AA.
                  PRT;
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Local Similarity 66.7%;
hes 8; Conservative
               PRELIMINARY;
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                                                                                                                                                                             TISSUE-TOTAL FETUS;
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                                                                                                                                                                                                                                                                                                 TISSUE=TOTAL FETUS;
HROMAS R.A.;
                                                                                                                                                                                         MEDLINE; 97444139.
                                                                                                                                                             SEQUENCE FROM N.A.
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SEQUENCE FROM N.A.
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009006;
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009002
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RESULT
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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EUKARYOTA; METAZOA; CHORDATA; VERIEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J., GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J., GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J., "Neurotactin, a membrane-anchored chemokine upregulated in brain inflammation."; membrane-anchored chemokine upregulated in brain NATHORS 37: 5611-617 (1997).
BEBLE, AF010586; G2317698; -.
MGD; MGI:1097153; SCYDI.
FPAM; PF00048; i18; 1.
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=BALB/C; TISSUE-BRAIN;
ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
ZLOTINK A., BAZAN J.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
 Score 72; DB 11; Length 133;
Pred. No. 2.88e-03;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 71.7%; Score 71; DB 11; Length 395; Local Similarity 72.7%; Pred. No. 4.77e-03; les 8; Conservative 2; Mismatches 1: Thans
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
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Pred. No. 4.77e-03;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                             SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, U92565; G2459677; -.
PFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
                                                                                                                                                                                          LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                     395 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Mismatches
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                                                                                                                                                                     01-07AV-1998 (TREMBLREL. 05, CREATED)
01-07AN-1998 (TREMBLREL. 05, LAST SEQI
01-NOV-1998 (TREMBLREL. 08, LAST ANN
                                                                                                                                                  PRT;
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Ouery Match 72.7%;
Best Local Similarity 66.7%;
                              8; Conservative
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Local Similarity 72.7%;
les 8; Conservative
                                                                                                                                               PRELIMINARY;
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| ELCLDPKENWVQ 12
                                                         73 ELCANPEEGWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 FCADPKEKWVQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 LCLDPKENWVQ 12
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                                                                                                                                                                                                                     FRACTALKINE
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035933
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035188
                             Matches
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Isolation and characterization of LMC, a novel lymphocyte and "Isolation and characterization of LMC, a novel lymphocyte and annocyte chamoattractant human CC chemokine, with myelosuppressive activity.";
BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
EMBL; 4001746; G2581781; -...
EMBL; AD007454; D1024965; -...
EMBL; AF088219; G3719365; -...
EMBL; AF055467; G3395776; -...
EMBL; AF055467; G3395776; -...
                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
HANGOC G., KWON B.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SHOODAL K, HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T., YOSHIE O., NOMIYAMA H.; BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                                   ô
                                                                                     EGUUS CABALLUS (HORSE).
EUKRAYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERLA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                           Score 69; DB 6; Length 97;
Pred. No. 1.29e-02;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
HEDRICK J.A., HELMS A., GORWAN D., ZLOTNIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                       SECUENCE FROM N.A.
TISSUB-BROWHOALVPOLAR TISSUB;
TISSUB-BROWHOALVPOLAR TISSUB;
SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
BUBL; AF062377; G3126973; --
BUBL; AF062377; G3126973; --
BUBL; AF062377; G3126973; --
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01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
1L-10-INDUCIBLE CHEMOKINE.
                                  01-AGG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AGG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                                                      120 AA.
     97 AA.
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                            01-AUG-1998 (TREMBLREL. 07, CREATED)
       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                Query Match
Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
       PRELIMINARY;
                                                                                                                                                                                                                                                                                                      1 ELCLDPKENWVO 12
                                                                                                                                                                                                                                                                                  75 EVCLNPHTKWVQ 86
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SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOMIYAMA H.;
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SEQUENCE
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062812;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K., KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R., MIXAKAWA T.;
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                                                                                                                                                                                                                                                                                                                        LAGUENCE FROM N.A.

PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
NARDELLI B., PPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.,
GENTZ R., GAROTTA G.,
J. EXP. MED. 0.0-0(0).
EMBL; U85768; G1916255; -
PFAM, PF00048; LI8; 1.

PERM, PE00048; LI8; 1.

PERM, PE00048; LI8, 1.

SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 68.7%; Score 68; DB 4; Length 119; Local Similarity 58.3%; Pred. No. 2.11e-02; es 7; Conservative 4; Mismatches 1; Indels
Score 69; DB 4; Length 120;
Pred. No. 1.29e-02;
5; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; D63785; D1010501; -. PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PPRAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
                                                                                                                                                                                       01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LD78 ALPHA BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3F87F1C6 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80 AA.
                                                                                                                                                              119 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LD78 ALPHA BETA PRECURSOR (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1
16
>80
80
8857 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66.7%;
58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7; Conservative
        Query Match
Best Local Similarity 50.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65 QVCADPSEEWVQ 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ::| |||::|||
1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72 QFCGDPKQEWVQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                       74 EVCTNPNDDWVQ 85
                                                                                                    1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON_TER
SEQUENCE
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014745
014745;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                      LT 8
000175
000175;
                                                                                                                                                                                                                                                    MPIF-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE),
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                           LESSLAUER W.;
"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998)
                                                                                                                                                                                                                                                                                                  ó;
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                                                                                                                    UTANS-SCHWEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                    METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
                                                                                                                                                                                                                                                                        Score 65; DB 11; Length 97;
Pred. No. 9.07e-02;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65.7%; Score 65; DB 13; Length 104; 63.6%; Pred. No. 9.076-02; vative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                             NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
                         01-NOV-1998 (TREWBLREL. 08, CREATED)
01-NOV-1998 (TREWBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                           SUBNITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, A7007862; E1312757;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SICK C.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; Y14971; E1295103; -.
                                                                                                                                                                                                                                                                                                                                                                            01-506-1998 (TREMBLREL. 07, CREATED)
01-506-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-506-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                CHEMOKINE ST38.
               97 AA.
                                                                                                                                                                                                                                                      053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE 104 AA; 11199 MW; 40C2EF8A CRC32;
                                                                                                                                                                                                                                                                                                                                                                   PRT; 104 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        397 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     K60 PROTEIN.
                                                                                                                                                                                                                                    POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL.
             PRT;
                                                                                                                                                                                                                                  1 27 1
28 97
97 AA; 10826 MW;
                                                                                                                                                                                                                                                                        Match
Local Similarity 70.0%;
Les 7; Conservative
           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           GALLUS GALLUS (CHICKEN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE-MACROPHAGE LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                          K60 PROTEIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104
                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                       74 VCADPKQNWV 83
                                                                                                                                                                                                                                                                                                                   75 EVCLDPTAPWV 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 ELCLDPKENWV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
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                                                                                                                                                                                    VILLARES R.;
                                                                                                                                                                                                                                                    SEQUENCE
JT 10
089093
                  089093;
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073912
073912;
                                                                                                                                                                                                                                 SIGNAL
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P78423
RESULT
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=NORLAND; TISSUE=LEAVES;
MEDLINE; 9336794.
SCHLAGNHAUFER C.D., GLICK R.E., ARTECA R.N., PELL E.J.;
"Expression of the CMS-associated urfs sequence in transgenic petunia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1996 (TREMBLREL. 09, LAST SEQUENCE UPDATE)
1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE (EC 4.4.1.14)
(ACC SYNTHASE) (FRAGMEN).
50CANUM TUBEROSUM (POTATO).
50CANUM TUBEROSUM (POTATO).
50CANUM TUBEROSUM STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
60PHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS;
71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- COFACTOR: PYRIDOXAL-PHOSPHATE.
-!- COFACTOR: PYRIDOXAL PHOSPHATE (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO CLASS-I OF PYRIDOXAL-PHOSPHATE-DEPENDENT AMINOTRANSFERASES.
                                                                                                                                                                               BAZAN J.F., BACON K.B., HARDIMAN G., WANG W., SOO K., ROSSI D., GREAVES D.R., ZLOINIK A., SCHALL T.J.; A new class of membrane-bound chemokine with a CX3C motif."; NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
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-!- CATALYTIC ACTIVITY: S-ADENGSYL-L-METHIONINE = 1-AMINOCYCLOPROPANE-1-CARBOXYLATE + METHYLTHIOADENOSINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 63; DB 4; Length 397;
Pred. No. 2.34e-01;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
01-MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL 1 24 POTENTIAL.
CHAIN 25 397 CX3C CHEMOKINE.
SEQUENCE 397 AA; 42202 MW; C8093D7D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             455 AA; 51509 MW; 2C65C534 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              455 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; L20634; G927207; PROSITE; PS00105; AA_TRANSFER_CLASS_1; 1. PPAM; PF00155; aminotran_1; 1. MENDEL; 10716; SOLTU, ACS; 4. LYASE; PYRIDOXAL PHOSPHAIE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match
Local Similarity 70.0%;
                                                      CX3C CHEMOKINE PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 97177111
                                                                                                                                                                       97177111
                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 FCADPKEQWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 LCLDPKENWV 11
                                                                      A-152E5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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Q43168
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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STRAIN-CV. PIKRED: TISSUE-PERICARP;
STRAIN-CV. PIKRED: A 1465004.

LI N. WIESMAN Z., LIU D., MATTOO A.K.;
LI N. WIESMAN Z., LIU D., CATOO A.K.;

"Deletion of the carboxyl-terminal region of a name of the carboxylic acid synthase, a key protein in the l-aminocyclopropare-l-carboxylic acid synthase; a key protein in the biosynthesis of ethylene, results in catalytically hyperactive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- COFACTOR: PYRIDOXAL-PHOSPHATE.
-!- COFACTOR: PYRIDOXAL PHOSPHATE.
-!- SIMILARITY: BELONGS TO CLASS-I OF PYRIDOXAL-PHOSPHATE-DEPENDENT
AMINOTRANSFERASES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LYCOPERSICÓN ESCULENTUM (TOMATO).
EUGAPERSICÓN ESCULENTUAE; STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS;
ASTERIDAE; SOLANANAE; SOLANALES; SOLANACEAE; SOLANUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YIP W.K., MOORE T., YANG S.F.; "Differential accumulation of transcripts for four tomato 1-aminocyclopropane-1-carboxylate synthase homologs under various conditions.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
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-1- CALLYTIC ACTIVITY: S-ADENGYL-L-METHIONINE =
1-AMINOCYCLOPROPANE-1-CARBOXYLATE + METHYLIHIOADENOSINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 63; DB 10; Length 477;
Pred. No. 2.34e-01;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                            01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
1-AMINOCYCLOPROPANE 1-CARBOXYLATE SYNTHASE (EC 4.4.1.14)
(1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE) (ACC SYNTHASE)
Length 455;
Score 63; DB 10; Length 455
Pred. No. 2.34e-01;
3; Mismatches 2; Indels
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01-AGG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
PUTATIVE DISEASE RESISTANCE PROTEIN (FRAGMENT).
ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE 477 AA; 53784 MW; 6997FD75 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            158 AA.
                                                                                                                                                                                                                                                                                                              477 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; X62536; G19164; --
EMBL; M8318; G867990; --
PROSITE; PS00105; AA_TRANSFER_CLASS_1; 1.
PFAM, PF00155; aminotran_1; 1.
MENDEL; 15548; LYCes_Acs;mn15548.
                                                                                                                                                                                                                                                                                                                                                                         01-MAY-1997 (TREMBLREL. 03, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. BIOL. CHEM. 269:6908-6917(1994).
                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 207-295 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 54.5%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LYASE; PYRIDOXAL PHOSPHATE.
             Ouery Match
Best Local Similarity 54.5%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26 QLCLDLIEDWI 36
                                                                                                                                                                               monomeric enzyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LT 15
064975
064975;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FRAGMENT)
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AC 06'
DT 01
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EUKARYOTA; VIRIDIPLANTAE; STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS; ROSIDAE;
CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                     "Identification of Figure homologous DNA fragments genetically linked to disease resistance loci in Arabidopsis thaliana.";
MOL. PLANT MICROBE INTERACT. 11:251-258(1998).
EMBL, AF039381; G3075472;
                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                      ô
                                                                                                       AARTS M.G., TE LINTEL HEKKERT B., HOLUB E.B., BEYNON J.L., STIEREMA W.J., PEREIRA A.;
                                                                                                                                                                                                                                                                      Length 158;
                                                                                                                                                                                                                                                                     Match 62.6%; Score 62; DB 10; Length 158 Local Similarity 62.5%; Pred. No. 3.75e-01; Lodels bes 5; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                          158 AA; 18235 MW; 12D846C9 CRC32;
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                                                                      SEQUENCE FROM N.A.
STRAIN=CV. LANDSBERG ERECTA;
MEDLINE; 98191999.
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SEQUENCE
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5'-NUCLEOTIDASE (FRAGM PUTATIVE CYCLIC NUCLEO

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PYROPHOSPHATE-DEPENDEN MYB4 TRANSCRIPTION FAC

COLLAGEN ALPHA 1(II) C TYPE II COLLAGEN (FRAG COLLAGEN TYPE IIA (FRA

011293 081811 084218 096218 0075435 093229 002797 002797 00828 048628 096463 090729

CHROMODOMAIN-HELICASE-

HYPOTHETICAL 38.8 KD P PUTATIVE PHYTOCHELATIN INTERFERON INDUCIBLE P 2-ALPHA COLLAGEN (COLL NITRIC OXIDE SYNTHASE. NIEMANN-PICK C DISEASE ALPHA-1 TYPE II COLLAG

ECO O PROTEIN (FRAGMEN TRANSCRIPTION FACTOR. TRANJ. ATPASE ALPHA-SUBUNIT (

F1707.14 PROTEIN.

Q26055 Q26240 Q15118 Q14047 Q67634 Q67634 P94875

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protein - protein database search, using Smith-Waterman algorithm
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130.268 Million cell updates/sec
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5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle
9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified
13:sp_vertebrate 14:sp_virus
                                                                                                                                                                                      Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mean 24.746; Variance 30.425; scale 0.813
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Listing first 45 summaries
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(1-12) from US09150813.pep
92
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Perfect Score:
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Pred. No.

Description

Query Match Length DB

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LECA-1 PROTEIN PRECURS
K60 PROTEIN PRECURSOR.
MELANOMA GROWTH STIMUL

2.63e-02 2.63e-02 7.41e-02 7.41e-02 5.57e-01 5.57e-01 5.57e-01 9.11e-01 9.11e-01 1.48e+00 1.4

PERMEMBILITY FACTOR 2
TYPE IIA PROCOLLAGEN (
SELF-INCOMPATABILITY G
SELF-INCOMPATABILITY G

6000

DOPAMINE DIB RECEPTOR.
HYPOTHETICAL 54.3 KD P
PRO-ALPHA-1 TYPE II CO
PRO-ALPHA-1 TYPE II CO
PRO-ALPHA-1 TYPE II CO
DRO-ALPHA-1 TYPE II CO

042936 062033 062031 062032 090192

HYPOTHETICAL 48.6 KD P
PUTATIVE ADP-L-GLYCERO
OTF22-1 PROPEDI.
DNA FOR OTN REGION GEN
HYPOTHETICAL 25.8 KD P
SIMILARITY TO UDP-GLUC

073912 062764 046678 046678 006963 087143 057098 P73989 006321 026321 026321

SEQUENCE FROM N.A.

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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; CAPRINAE; OVIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
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                                                                                                                                                                                                                                                                                                EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PERISSODACTYLA; EQUIDAE; EQUUS.
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0
                                                                                                          Score 64; DB 13; Length 104;
Pred. No. 2.63e-02;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                        01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
MELANOMA GROWTH STIMULATORY ACTIVITY HOMOLOG (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        Score 63; DB 6; Length 59;
Pred. No. 4.42e-02;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match
Best Local Similarity 58.3%; Pred. No. 7.41e-02;
Matches 7; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                 RIEDER S., CHECA-CORTES M.L., JOERG H., STRANZINGER G.; SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF053497; G3033533;
                            SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; Y14971; E1295103; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11.)
YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U95814; G2735499; -.
SEOUENCE 103 AA; 10820 MW; C34945B7 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                                                                            K60 PROTEIN.
; 40C2EF8A CRC32;
                                                                                                                                                                                                                     59 AA.
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE 59 AA; 6344 MW; 0C5EA8CC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                103 AA.
                                                                  POTENTIAL.
                                                                                                                                                                                                                                 01-AUG-1998 (TREMBLREL. 07, CREATED)
                                                                                                                                                                                                                   PRT;
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                                                           SIGNAL 1 20 PC CHAIN 21 104 K( SEQUENCE 104 AA; 11199 MW;
                                                                                                         Match
Local Similarity 66.7%;
les 8; Conservative
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Local Similarity 66.7%;
les 8; Conservative
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         TISSUE=MACROPHAGE LIKE;
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                                                                                                                                                75 EVCLDPTAPWVK 86
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1 EICLDPEAPFLK 12

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STEPHENS R.S., KALMAN S., LAMMEL C.J., FAN J., MARATHE R., ARAVIND L., MITCHELL W.P., OLINGER L., TATUSOV R.L., ZHAO Q., KOONIN E.V.,
                                                                                                                                                                                                                                                                                                                                        STEPHENS R.S., KALMAN S., LAMMEL C.J., FAN J., MARATHE R., ARAVIND L., MITCHELL W.P., OLINGER L., TATUSOV R.L., ZHAO Q., KOONIN E.V.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'Genome Sequence of an Obligate Intracellular Pathogen of Humans:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BACTERIA; PROTEOBACTERIA; GAMMA SUBDIVISION; VIBRIONACEAE; VIBRIO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
PUTATIVE ADP-L-GLYCERO-D-MANNOHEPTOSE-6-EPIMERASE (EC 5.1.3.-).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- PATHWAY: LIPOPOLYSACCHARIDE CORE BIOSYNTHESIS.
EMBL; X59554; G48382;
HYPOTHETICAL PROTEIN; LIPOPOLYSACCHARIDE BIOSYNTHESIS; ISOMERASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 67.4%; Score 62; DB 2; Length 427; Best Local Similarity 70.0%; Pred. No. 7.41e-02; Matches 7; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 92212870.
STROEHER U.H., KARAGEORGOS L.E., MORONA R., MANNING P.A.; Serotype conversion in Vibrio cholerae 01."; PROC. NATL. ACAD. SCI. U.S.A. 89:2566-2570(1992).
                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AE001355; G3329295; -- HYPOTHETICAL PROTEIN.
                                        01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
HYPOTHETICAL 48.6 KD PROTEIN.
                                                                                                                      CHLAMYDIA TRACHOMATIS.
BACTERIA; CHLAMYDIALES; CHLAMYDIACEAE; CHLAMYDIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                      427 AA; 48583 MW; 249BBE61 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN=017 / BIOTYPE EL TOR / SEROTYPE OGAWA;
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314 AA; 35244 MW; A4A1B324 CRC32;
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                       PRT;
                PRELIMINARY;
                                                                                                                                                                                                                                                               Chlamydia trachomatis.";
SCIENCE 0:0-0(1998).
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                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                    STRAIN=D/UW-3/CX;
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                              084832;
LT 5
084832
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Q06321
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P73989;
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                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YAMASAKI S., SHIMIZU T., HOSHINO K., HO S., SHIMADA T., NAIR G.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "The genes responsible for O-antigen synthesis of Vibrio cholerae 0139 are closely related to those of Vibrio cholerae 022."; SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; X90547; E194949;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BACTERIA; PROTEOBACTERIA; GAMMA SUBDIVISION; VIBRIONACEAE; VIBRIO.
                                     Gaps
                                                                                                                                                                                                                                                          YAMASAKI S., SHIMIZU T., HOSHINO K., HO S., SHIMADA T., NAIR G.B.,
                                                                                                                                                                                                                                                                                The genes responsible for O-antigen synthesis of Vibrio cholerae olds are closely related to those of Vibrio cholerae 022."; SUBMITTED (ARR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AB012957; D1037474; -. SEQUENCE 314 AA; 35197 MW; BEAD8618 CRC32;
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                                                                                                                                                                                                                                                                                                                                                      Length 314;
                                                                                                                                                                                                                                                                                                                                                                           2; Indels
           Score 58; DB 2; Length 314;
Pred. No. 5.57e-01;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VIMONT S., DUMONTIER S., ESCUYER V., BERCHE P.;
SUBMITTED (FEB-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DNA FOR OTH REGION GENES.
                                                                                                                                                           LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Local Similarity 77.8%; Pred. No. 5.57e-01;
nes 7; Conservative 0; Mismatches 2
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                                                                                                                             314 AA
                                                                                                                                                  08, CREATED)
                                                                                                                               PRT;
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60
03,
               63.0%;
similarity 77.8%;
7; Conservative
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                                                                                                                                                     01-NOV-1998 (TREMBLREL.
                                                                                                                                                                 01-JAN-1999 (TREMBLREL.
01-JAN-1999 (TREMBLREL.
OTF22-1 PROTEIN.
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                             Best Local Similarity Matches 7; Conserv
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                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                              104 CLDREIPFL 112
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                                                                              3 CLDPEAPFL 11
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                                                                                                                                                                                                            VIBRIO CHOLERAE
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                     Query Match
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MEDLINE; 97313267.
MEDLINE; 97313267.
MEDLINE; 97313267.
MEDLINE; 97313267.
MEDLINE; 97313267.
M. HILLIER L., RILES L., ALBERMANN K., ANDRE B., ANSORGE W., BENES V., BRUCKNER M., DELIUS H., DUSTERHOFT A., BENES V., ENGTHA K.D., FLOHMANN K., ENTINE K., FLOHMANN K., ENTINE K., KOTTER P., LOUIS E.J., MESSENGUY F., MEMES H.W., MIOSGA T., MOSTL D.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 97061201.
KANEKO T., SATO S., KOTANI H., TANAKA A., ASAMIZU E., NAKAMURA Y.,
KANEKO T., SATO S., KOTANI H., SUGIURA M., SASAMOTO S., KIMURA T.,
MIYAJIWA N., HIROSAWA M., SUGIURA M., NAKAZAKI N., NARUO K., OKUMURA S.,
SHIMPO S., TAKEUCHI C., WADA T., WATANABE A., YAWADA M., YASUDA M.,
TABATA S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Sequence analysis of the genome of the unicellular cyanobacterium "Sequence analysis sp. PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions."; DNA RES. 3:109-136(1996).
EMBL: D90911; D1018792;
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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EUKARYOFA; FUNGI; ASCOMYCOTA; HEMIASCOMYCETES; SACCHAROMYCETALES;
SACCHAROMYCETACEAE; SACCHAROMYCES.
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                                                                                             Score 58; DB 2; Length 314;
Pred. No. 5.57e-01;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SYNECHOCYSTIS SP. (STRAIN PCC 6803).
BACTERIA; CYANOBACTERIA; CHROCCCCALES; SYNECHOCYSTIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (JUN-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01.NOV-1996 (TREMBLREL. 01, CREATED)
01.NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01.NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-1997 (TREMBLREL. 02, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
HYPOTHETICAL 25.8 KD PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62.0%; Score 57; DB 2; Le
36.4%; Pred. No. 9.11e-01;
ative 6; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         225 AA; 25816 MW; 651089AA CRC32;
EMBL; U47542; G1381034; -.
EMBL; A8012956; D1034551; -.
SEOUENCE 314 AA; 35184 MW; 285DABD8 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT; 1198 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY TO UDP-GLUCURONOSYLTRANSFERASES.
                                                                                                                                                                                                                                                                                                                                                                       225 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                             01-FEB-1997 (TREMBLREL. 02, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 36.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Conservative
                                                                                                           63.0%;
                                                                                                                 Query Match
Best Local Similarity 77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                              7; Conservative
                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EICLDPEAPFL 11
                                                                                                                                                                                                                    104 CLDREIPFL 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                       3 CLDPEAPFL 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-PCC6803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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MULLER-AUER S., NENTWICH U., OBERWAIER B., PIRAVANDI E., POHL T.M., SCHARTELLE D., PURNELLE B., RECHMANN S., RIEGER M., RINKE M., ROSE M., SCHARER M., SCHERENS B., SCHOLLER P., SCHWAGER C., SCHWARZ S., UNDERWOOD A.P., URRESTARAZU L.A., VANDENBOL M., VERHASSELT P., VIERENDEELS F., VOET M., VOLCKAERT G., VOSS H., WAMBUTT R., WEDLER E., "The nucleotide sequence of Saccharomyces cerevisiae chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOHNSON M.C., GOODMAN R.B. II, KAJIKAWA O., WONG V.A., MONGOVIN S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MARTIN T.R.;
"Cloning of two rabbit GRO homologues and their expression in alveolar macrophages.",
GENE 151:337-338 (1994).
EMBL: L28933; G455343;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                 Score 57; DB 3; Length 1198;
Pred. No. 9.11e-01;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 56; DB 6; Length 66;
Pred. No. 1.48e+00;
2; Mismatches 3; Indels
                                                                                                                                                                             SUBMITTED (NOV-1994) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                              SUBMITTED (NOV-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                              SUBNITIED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL: U17246; G577215; -.
PFAM: PF00169; PH; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOY-1996 (TREMBLREL. 01, CREATED)
01-NOY-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                      1198 AA; 136053 MW; 9F764258 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D4C4BC7D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PERMEABILITY FACTOR 2 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                 Match 62.0%;
Local Similarity 54.5%;
es 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE 66 AA; 7102 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŚEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
MEDLINE; 95129889.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                     SEQUENCE FROM N.A.
STRAIN-S288C (AB972);
                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-S288C (AB972);
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN=S288C (AB972);
                                                                                                                                                                                                                                                                                                                                                                                                                                                  193 FCLDEQEPFLN 203
                                                                                                            NATURE 387:0-0(0).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 ICLDPEAPFLK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42 EACLNPAAPMVK 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ||:| || :|
| EICLDPEAPFLK 12
                                                                                                                                                                                                                                    WATERSTON R.;
                                                                                                                                                                WOHLDMANN P.
                                                                                                                                                                                                                                                                                                    CHERRY J.M.;
                                                                                                                                                                                                                                                                                                                                                           TRANSFERASE.
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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Q28724
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01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
SELF-INCOMPATABILITY GLYCOPROTEIN (ALLELE S6) PRECURSOR (FRAGMENT).
LYCOPERSICON PERUYIANUM (PERUYIAN TOMATO).
EUKARYOTA: VIRIDIPLANTAE; STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS;
ASTERIDAE; SOLANANES; SOLANALES; SOLANGM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=LA 2163; TISSUE-STYLE;
MEDLINE; 94294411.
MEDLINE; 94294411.
TOOU J., KUNZ C., KOWYAMA Y., ANDERSON M., NEWBIGIN E., CLARKE A.;
Loss of a histidine residue at the active site of S-locus
ribonuclease is associated with self-compatibility in Lycopersicon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                   SEÓUENCE FROM N.A.
DU F., ACLAND G.M., RAY J.;
"Differential Expression of Type II Procollagen mRNA in Canine
                                                                                            CANIS FAMILIARIS (DG).
EUKARKOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SELF-INCOMPATABILITY GLYCOPROTEIN (ALLELE 56).
182D7702 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó
                                                                                                                                                                                                                                                                                                          Query Match 60.9%; Score 56; DB 6; Length 119; Best Local Similarity 75.0%; Pred. No. 1.48e+00; Matches 6; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 212;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 56; DB 10; Length 212
Pred. No. 1.48e+00;
1; Mismatches 1; Indels
                                                                                                                                                                                                           SUBMITTED (SEP-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF023169; G3687592; -.
PROSITE; PS01208; VWFC; 1.
                                      01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
TYPE IIA PROCOLLAGEN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROC. NATL. ACAD. SCI. U.S.A. 91:6511-6514(1994).
EMBL: Z26583; G404315; -
PFAM: PF00445; ribonuclease_T2; 1.
                                                                                                                                                                                                                                                                               119 AA; 12413 MW; 619469D2 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            212 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              218 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LT 14
040245 PRELIMINARY; PRT;
040245; 01-NOV-1996 (TREMBLREL. 01, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     212 AA; 24733 MW;
              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 larity 77.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                        119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184 ICLDPEAKY 192
                                                                                                                                                                                                                                                                                                                                                                   58 CLSPETPF 65
                                                                                                                                                                                                                                                                                                                                                                                           3 CLDPEAPF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 ICLDPEAPF 10
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                                                                                                                                                                                                                                                      NON_TER
NON_TER
SEQUENCE
 LT 12
077753
077753;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q40243
Q40243;
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SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHAIN
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RESULT
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TELEOSTEI; ANGUILLIFORMES; ANGUILLIDAE; ANGUILLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDILARE; 9.1000001.

**CARDINAUD B., COUDOUDEL S., VINCENT J.D., VERNIER P.;

**EALY emergence of three dopamine D1 receptor subtypes in vertebrates. Molecular phylogenetic, pharmacological, and functional criteria defining D1A, D1B, and D1C receptors in European eel Anguilla anguilla.";

**J. BIOL. CHEM. 272:2778-2787(1997).

**J. SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN (BY SIMILARITY).

**PRAL, U62920: G1118040.

**PROSITE: PSO0237: G_PROTEIN_RECEPTOR: 1.

**PRAN, PPROGO01: 7tm_l; 1.

**PROSITE: COUPLED RECEPTOR: TRANSMEMBRANE; GLYCOPROTEIN.

SPROTEIN COUPLED RECEPTOR: SPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
SELF-INCOMPATABILITY GLYCOPROTEIN (NON- FUNCTIONAL ALLELE) PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=LA 2157; TISSUE=STYLE;
MEDILINE; 94294411.
ROYO J., KUNZ C., KOWYAMA Y., ANDERSON M., NEWBIGIN E., CLARKE A.;
ROYO J., A A A A A STAIN OF A STAIN OF A LIBRAIN OF
                                                                                                        LICOPERSICON PERUVIANUM (PERUVIAN TOMATO).
EUKARYOTA; VIRLDIPLANTAE; STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS;
ASTERIDAE; SOLANANAE; SOLANALES; SOLANACEAE; SOLANUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
SELF-INCOMPATABILLITY GLYCOPROTEIN
(NON-FUNCTIONAL ALLELE).
I 1EB4B4CB CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 70.0%; Pred. No. 1.48e+00;
Matches 7; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 56; DB 10; Length 218
Pred. No. 1.48e+00;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1997 (TREMBLREL. 02, CREATED)
01-FEB-1997 (TREMBLREL. 02, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROC. NATL. ACAD. SCI. U.S.A. 91:6511-6514(1994).
EMBL, 226581; G404334; -
PFAM; PF00445; ribonuclease_T2: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANGUILLA ANGUILLA (EUROPEAN FRESHWATER EEL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT; 458 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: Fri Feb 4 17:17:30 2000 Job time : 60 secs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         218 AA; 25384 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60.9%;
Similarity 77.8%;
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOPAMINE DIB RECEPTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      443 DICLDRLAPF 452
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1 EICLDPEAPF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     190 ICLDPEAKY 198
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                                                                                                     (FRAGMENT)
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Q98843;
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:28:08 2000; MasPar time 5.07 Seconds 129.163 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-43 (1-12) from US09150813.pep 91 1 QVCADPSESWVQ 12 Title: Description: Perfect Score:

Sequence:

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremb19 Database:

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 1:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 25.020; Variance 34.042; scale 0.735

Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	1.64e-06	8.65e-04	1.43e - 03	6 280-03	000000	0.00	7.76e-02	2.76e-02	2.76e-02	4 470.03	70 0/1-	4.4/e-02	7.20e-02	7.20e-02	1 160-01	1.100.01	1.00-01	2.946-01	7.94e-01	2.94e-01	2 940-01	10.079	4.070.01	40.016.4
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CXC CHEMOKINE PRECURSOR LYMPHOTACTIN PRECURSOR LFCA-1 PROTEIN PRECURS	CYTOKINE.	U	PROTESTICAL 3/:1 ND F PROTEST. SERINE, 12 N	PROTEIN TYROSINE KINAS	,	41.0 AD	FAST KINASE.	B LYMPHOCITE CREMONITY	MUTY HOMOLOG.	ENVELOPE GLICOPROIEIN:	TOID3.3 PROTEIN.	RNA HELICASE.	TRANSITIN.	SIMILARITY TO EGF-LINE	HYPOTHETICAL PROTEIN (PUTATIVE EPIMERASE/DEH	PUTATIVE MONOCARBOXYLA	0	T24B8.7 PROTEIN.
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		PRIMATES;						Gaps			
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PRT;	CREATED) LAST SEQUENCE UPDATE) LAST ANNOTATION UPDATE) RAGMENT).	; VERTE	NARUSE K., NAKASHIMA H.,)TO Y., NOMIYAMA H., IIO	/GENBAI		POTENTIAL. LD78 ALPHA	3F87F1C6 CRC32;	Score 86; Pred. No. 0; Misma			PRT CREAT LAST LAST
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PRELIMINARY	(TREMBLREL. (TREMBLREL. (TREMBLREL. ETA PRECURS	HOMO SAPIENS (HUMAN). EUKARYOTA; METAZOA; CHORDATA CATARRHINI; HOMINIDAE; HOMO.	[1] TESQUENCE FROM N.A. TISSUE-BRAIN; ISHIZUKA K., IGATA-YI R., KATSURAGI S., KIN Y., OHMC	MIYAKAWA T.; SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; D63785; D1010501; - PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.	18; 118; 1.	17	80 80 AA;	94.58 Similarity 91.78 11; Conservative	OVCADPSEEWVQ	QVCADPSESWVQ	2 115467; 115467; 11-JAN-1998 (TREMBLREL. 05 01-JAN-1998 (TREMBLREL. 05 01-NOV-1998 (TREMBLREL. 05 11-10-INDUCIBLE CHEMOKINE.
	1996 1996 1999 PHA B	PIENS TA; M INI;	E FRC BRAIN A K.,	TA T., TED (7) 063785 1; PS(F000	J	ы	ch 1 Simil 11;	VCADP	VCADE	; -1998 -1998 -1998 INDUC
1 1 014745	014/45; 01.NOV-1996 (TREMBLREL: 01, CREATED) 01.NOV-1996 (TREMBLREL: 01, LAST SEQ 01.ANN-1999 (TREMBLREL: 09, LAST ANN LD78 ALPHA BETA PRECURGOR (FRAGMENT)	HOMO SAPIENS (HUMAN). EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; CATARRHINI; HOMINIDAE; HOMO.	[1] SEQUENCE FROM N.A. TISSUE=BRAIN; ISHIZUKA K., IGATP KATSURAGI S., KIN	MIYAKAWA T.; SUBMITTED (A EMBL; D63785 PROSITE; PS0	PFAM; PF00048; SIGNAL.	SIGNAL CHAIN	NON_TER SEQUENCE	Query Match Best Local Matches	65 0	- Ö	117 2 015467; 015467; 01-JAN-1998 01-JAN-1998 01-NOV-1998 IL-10-INDUC: IL-10-ROK OR SC
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 98308096.
YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
HANGOC G., KWON B.S.;
"Isolation and characterization of LMC, a novel lymphocyte and
monocyte chemoattractant human CC chemokine, with myelosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; INUCLEOTIDE sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.; "Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                  SHOUDAI K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T., YOSHIE O., NOMIXAMA H.;
BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                       Structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 81.3%; Score 74; DB 4; Length 120; Best Local Similarity 50.0%; Pred. No. 8.65e-04; Matches 6; Conservative 5; Mismatches 1; Indels
                                                          HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                               SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
GAMMAHERPESVIRINAE; RHADINOVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                         activity.";
BICCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
BNBL: 991746; G2581781;
EMBL: AB007454; D1024963;
EMBL: AF088219; G3719365;
EMBL: AF055467; G3395776;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROC. NATL. ACAD. SCI. U.S.A. 93:14862-14867(1996).
                                                                                                                                                                                                                                                                                                                                                                                                      120 AA; 13600 MW; A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      098158; 012569;
01-FEB-1997 (TREWBLREL. 02, CREATED)
01-JUL-1997 (TREWBLREL. 04, LAST SEQ
01-NOV-1998 (TREWBLREL. 08, LAST SNIN
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                                              SEQUENCE FROM N.A.
                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                             NOMIYAMA H.;
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EUKANYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                              SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                    SEQUENCE FROM N.A.
NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
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PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S., SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                             MEDLINE, 97296220.
NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        / Match 80.2%; Score 73; DB 14; Length 95; Local Similarity 66.7%; Pred. No. 1.43e-03; es 8; Conservative 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             SUN R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; 075698; G1718266;
EMBL; 074698; G1658273;
EMBL; 0743872; G2246546;
EMBL; 071366; G3551763;
PPAM; PF00048; 118; 1
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAX-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, AF006637; G2209189; --
EMBL, AF001980; G2524927; --
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; I18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10485 MW; 5283348D CRC32;
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| QVCADPSESWVQ 12
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009002
009002;
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NEUROTACTIN.
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035188
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                          MUS MUSCULUS (MOUSE).
EUKRYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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"Isolation and characterization of Exodus-2, a novel C-C chemokine with a unique 37-amino acid carboxyl-terminal extension.";
J. IMMUNOL. 159:2554-2558 (1997).
                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 97400322.
HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine
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Local Similarity 58.3%; Pred. No. 6.38e-03;
es 7; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                         Length 133;
                        Query Match 76.9%; Score 70; DB 11; Length 133 Best Local Similarity 58.3%; Pred. No. 6.38e-03; Matches 7; Conservative 4; Mismatches 1; Indels Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U88322; G3169697; --
EMBL; MGI:1097677; SCYA21.
PFAM; 118; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                              01-JUL-1997 (TREMBLREL. 04, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
  133 AA; 14558 MW; C0532523 CRC32;
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                                                                                                                                                          133 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        000585;
01-JUL-1997 (TREMBLREL: 04, CREATED)
01-JUL-1997 (TREMBLREL: 04, LAST SEQU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                          PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73 ELCANPEEGWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                          1 OVCADPSESWVO 12
                                                                                 73 ELCANPEEGWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
TISSUE=TOTAL FETUS;
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                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. TISSUE=TOTAL FETUS;
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000585
          SEQUENCE
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009006
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SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                             Gaps
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STRAINBALBYC; TISSUE-BRAIN;
SCOSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
ZLOTNIK A., BAZAN J.F.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U92565; G245677; -
SPRAM; PF00046; 118; 1.
SEQUENCE 395 AA: 42040 MW; 3997A113 CRC32;
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                                                                                                                                                                                                                                                                            Score 67; DB 4; Length 134;
Pred. No. 2.76e-02;
2; Mismatches 2; Indels
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LAST ANNOTATION UPDATE)
HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQ
01-NOV-1998 (TREMBLREL. 08, LAST ANN
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NATURE 387:611-617(1997).
EMBL; AF010586; G2317698; -.
MGD; MGI:1097153; SCXD1.
                                                                                                                                                                                                                                                                                      Query Match

Best Local Similarity 66.7%;
Matches 8; Conservative
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000175;
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                                                                                                                                                                                               MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                             Gaps
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"Isolation and characterization of Marek's disease virus (MDV) cDNAs mapping to the BamHI-12, BamHI-02, and BamHI-L fragments of the MDV infected with MDV.";
VIROLOGY 213:590-599(1995).
EMBL: U34966; G1185444; -.
PFAM; PF00048; i18; 1.
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MEDLINE; 96074534.
PENG Q., ZENG M., BHUIXAN Z.A., UBUKATA E., TANAKA A., NONOYAMA M.,
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"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
                                  Score 67; DB 11; Length 395;
Pred. No. 2.76e-02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                     72.5%; Score 66; DB 11; Length 97; 70.0%; Pred. No. 4.47e-02; 7: Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                VILLARES R.;
SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF053313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                              01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ECO Q PROTEIN (FRAGMENT).
GALLID HERPESVIRUS TYPE 1.
VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
ALPHAHERPESVIRINAE; VARICELLOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 067634 PRELIMINARY; PRT; 203 AA. 067634: 01-NOV-1996 (TREMBLREL. 01, CREATED) 01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE) 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
PFAM; PF00048; i18; 1.
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
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CC CHEMOKINE ST38.
                                                                                                                                                                                                                                                                                                                                                                                       053405BD CRC32;
                                                                                                                                     97 AA.
                                                                                                                                    PRT;
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                                  PRELIMINARY;
                                                                     74 CADPKEKWVQ 83
                                                                                  3 CADPSESWVQ 12
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                                 Query Match
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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SEQUENCE FROM N.A.
PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
NARDELLI B., PIPPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.
GENTZ R., GAROTTA G.;
J. EXP. MED. 0:0-0(0).
EMBL; U85768; G1916252;
PRAM; PF00048; 118; 1.
SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;
                                                         Query Match

Dest Local Similarity 63.6%; Pred. No. 4.47e-02;

Matches 7; Conservative 1; Mismatches 3; Indels
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Pred. No. 7.20e-02;
2; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF043341; G2905632; -.
EMBL; AF08819; G3719366; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                  (TREMBLREL. 06, CREATED)
(TREMBLREL. 06, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
NON_TER 1 1
SEQUENCE 203 AA; 23132 MW; 887D04C3 CRC32;
                                                                                                                                                                                                                                                                                   91 AA.
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CF404FAD CRC32;
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CHAIN 24 91
SEQUENCE 91 AA; 99900 MW;
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Similarity 58.3%;
7; Conservative
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01-JUN-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                            145 VCVDPEAPWVQ 155
                                                                                                                                                                                    2 VCADPSESWVQ 12
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STROMGYLOCENTROTUS PURPURATUS (PURPLE SEA URCHIN).
EUKARYOTA; METAZOA; ECHINODERMIA; ECHINOZOA; ECHINOIDEA;
ECHINACEA; ECHINOIDA; STRONGYLOCENTROIIDAE; STRONGYLOCENTROTUS.
                                                                                                                                                                                                                                                                                                                                                                                           CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
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MEDLINE; 98119758.
GINGRAS D., GAGNON C.;
GINGRAS D., GAGNON C.;
molecular cloning and characterization of a radial spoke head
protein of sea urchin sperm axonemes: involvement of the protein in
the regulation of sperm motility.";
MOL. BIOL. CELL 9:513-522(1998).
MBL. 913123; G2905895;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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TISSUE-PANCREAS.

MEDLINE; 97275143.

HEOMAS R., GRAY P.W., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K., HROMAS R., GRAY P.W., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K., BELL G.I., TAKEDA J., ARONICA S., GORDON M., COOPER S., BROXMEYER H.E., KLEMSZ M.J.;

"Cloning and characterization of exodus, a novel beta-chemokine.";

"Cloning and characterization of exodus, a novel beta-chemokine.";

PLOOD 89:3315-3322(1997).

EMBL; 064197; 61778717;

PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.

PFRAM; PF00048; i18; 1.0691 MW; 152684C0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 64; DB 4; Length 95; Pred. No. 1.16e-01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                     01-NAY-1997 (TREMBLREL. 03, CREATED)
01-NAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     552 AA; 62723 MW; 898CFCCC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Mismatches
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01-NOV-1998 (TREMBLREL. 08, CREATED)
                                                                                                                                                                                                           PRT;
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Best Local Similarity 60.0%;

Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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                                                                                         1 QVCADPSESWVQ 12
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                                         72 QFCGDPKQEWVQ 83
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046178
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Q99664;
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AC 08
DT 01
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01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ABCD-1.
MUS MUSCULUS (WOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                           "Activated murine B lymphocytes and dendritic cells produce a novel CC chemokine which acts selectively on activated T cells.";
J. EXP. MED. 188.451-463(1998).
ENBL; AF052505; 63378116; -.
SEQUENCE 92 AA; 10302 MW; BC7219A0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                             MEDLINE: 98353531.
SCHANIEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C.,
STHMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G.,
SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match
Best Local Similarity 54.5%; Pred. No. 2.94e-01;
Matches 6; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Search completed: Fri Feb 4 17:29:06 2000
                                                                                                                                              SCIUROGNATHI; MURIDAE; MURINAE; MUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74 DICADPROVWV 84
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MPsich_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:34:01 2000; MasPar time 5.10 Seconds 128.544 Million cell updates/sec Run on:

>US-09-150-813-44 (1-12) from US09150813.pep 91

Tabular output not generated.

1 OVCADPSESWVQ 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

Searched:

179066 seqs, 54579741 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus Database:

Mean 25.020; Variance 34.042; scale 0.735 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	11.64e-06 11.45e-06 11.45e-03 6.38e-03 6.38e-02 2.76e-02 4.47e-02 4.47e-02 4.47e-02 1.16e-01 1.16e-01 1.16e-01 2.94e-01 2.94e-01 2.94e-01 4.67e-01
	Description	LD78 ALPHA BETA PRECUR LL.10-INDUCIBLE CHEMOK ORF K6. SMALL INDUCIBLE CYTOKI BETA CHEMOKINE EXODUS- BETA CHEMOKINE EXODUS- FRACTALKINE. C CHEMOKINE ST38 PREC ECO Q PROTEIN (FRAGMEN RANTES PRECURSOR. MPIF-2. CHEMOKINE SPORDEN RANTES PRECURSOR. MPIF-1. VMIP-1B. CC CHEMOKINE EXODUS. CC CHEMOKINE EXODUS. K60 PROTEIN PRECURSOR. MACROPHAGE-DERIVED CHE
	GI	014745 0015467 0098158 009006 0009006 000585 035933 035188 0895138 089664 000175 099664 000175 099664 000175 0998157 0988157 0988157
	DB	4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	r PK	14.5 16.9 16.9 16.9 16.9 17.2 17.2 17.2 17.2 17.2 17.2 17.2 17.2
æ	Query Match	94.5 981.3 980.2 980.2 76.9 99.2 72.5 72.5 72.5 72.5 72.5 72.5 73.6 69.2 73.6 69.2 73.6 69.2 74.1 74.
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	.; PRIMATES;			0; Gaps		
TE) DATE)	AALIA; EUTHERIA; P! A H., OHUCHI K., IIO M., MIURA R.,	A BANKS.		angth 80; Indels		OATE) UPDATE)
PRT; 80 AA. CREATED) LAST SEQUENCE UPDATE) LAST ANNOTATION UPDATE) RAGMENT).	ORDATA; VERTEBRATA; MAMMALIA HOMO. R., NARUSE K., NAKASHIMA H., OHMOTO Y., NOMIYAMA H., IIO	NK/DDBJ DAT# CC; 1.	POTENTIAL. LD78 ALPHA BETA. 3F87F1C6 CRC32;	86; DB 4; Le No. 1.64e-06; Mismatches 1;		; 120 AA. ED) SEQUENCE UPDATE) ANNOTATION UPDATE)
PRT; CREATED) LAST SEC LAST ANN (FRAGMENT)	ORDATA; VERTE HOMO. R., NARUSE K OHMOTO Y., N	EMBL/GENBANK/I _CYTOKINES_CC;		Score; Pred 0;		PRT , CREAT , LAST , LAST
PRELIMINARY; PRT; (TREMBLREL. 01, CREATED) (TREMBLREL. 01, LAST SEQ) (TREMBLREL. 09, LAST ANN CTREMBLREL. 09, LAST ANN CTREMBLY PRECURSOR (FRAGMENT)	HOMO SAPIENS (HUMAN). EUKRARYOTA; MATAZOA, CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES; EUKRARYOTA; HOMINIDAE: HOMO. [1] SEQUENCE FROM N.A. TISSUE-BRAINA TISSUE-BRAINA TISSUE, NOMOTO Y., NAKASHIMA H., OHUCHI K., ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K.,	요 :님	1 1 <1 16 17 >80 80 80 80 AA; 8857 MW;	94.5%; Similarity 91.7%; 11; Conservative	QVCADPSEEWVQ 76 	PRELIMINARY; (TREMBLREL. (TREMBLREL. (TREMBLREL. IBLE CHEMOKIN CYA16.
1 014745; 014745; 01-NOV-1996 01-NOV-1996 01-JAN-1999 1.D78 ALPHA	HOMO SAPIENS (HUMAN) EUKARYOTA; METAZOA; CATARRHINI; HOMINIDS [1] SEQUENCE FROM N.A. TISSUE-BRAIN; ISHIZURA K., IGATA-; KATSURAGI S., KIN Y	MIYAKAWA T SUBMITTED EMBL; D637 PROSITE; P PFAM; PF00	SIGNAL NON_TER SIGNAL CHAIN NON_TER SEQUENCE	Query Match Best Local S: Matches 1:	65 QVCA 1111 QVCA	RESULT 2 1D 015467 AC 015467 01-JAN-1998 DT 01-JAN-1998 DT 01-JAN-1998 DT 01-JAN-1998 DT 01-NOV-1998 GN ILINOK OR S
RESULT ID Q AC Q DT 0 DT 0 DT C	OS OC RN RP RP RA RA	RA DR DR	K FF FF SO SO	ŌĂĬ	Db Qy	RES ID AC DT DT DT OF GN

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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
HANGCG G., KWON B.S.;
ISOLation and characterization of LMC, a novel lymphocyte and
monocyte chemoattractant human CC chemokine, with myelosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 97094384.
MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                             SHOUDAL K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T., YOSHIE O., NOMIYAMA H.; BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                               Structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 74; DB 4; Length 120;
Pred. No. 8.65e-04;
5; Mismatches 1; Indels
                                                                                                                                         HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITIED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
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098158; O12569; PRELIMINARY; PRT; 95 AA.
098158; O12569; CTEMBLEEL. 02, CREATED)
01-7UL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
GAMMAHERPESVIRINAE; RHADINOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
EMBL; 199746; G2581781;
EMBL; AB007454; D1024963; --
EMBL; AF088219; G37193465; --
EMBL; AF088219; G3719346; --
EMBL; AF088467; G3395776; --
PFAM; PF00048; il8; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE 120 AA; 13600 MW; A079DF66 CRC32;
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SCIENCE 274:1739-1744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 81.3%;
Local Similarity 50.0%;
es 6; Conservative
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                                                                                                                 SEQUENCE FROM N.A.
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RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                    SEQUENCE FROM N.A.
NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-THYMUS;
TANABE S., LUU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A.,
COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A., DORF M.E.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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HEDRICK J.A., ZLOTNIK A.;
Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUEMITIED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                            MEDLINE; 97296220.
NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its
                                                                                                                                                                                                                                                                                                                                                                                                    80.2%; Score 73; DB 14; Length 95; 66.7%; Pred. No. 1.43e-03;
                                                                                                                                                                                                                                                                                  SUN R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U75698; G1718266; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ECOURNCE FROM N.A.
HEDRICK J.A., ZLOTNIK A.;
EUBRITED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
ENBL; AF001980; G2624927;
MGD; MGI:1097677; SCXA21.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                    PRT; 133 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-071-1997 (TREMBLREL. 04, CREATED)
01-071-1997 (TREMBLREL. 04, LAST SECC
01-NOV-1998 (TREMBLREL. 08, LAST ANNC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMALL INDUCIBLE CYTOKINE A21 (TCA4).
                                                                                                                                                                                                                                            VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 66.7%;
8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74 QICADPSKNWVR 85
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                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                 SEQUENCE FROM N.A.
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01-NOV-1998
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009002
009002;
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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TISSUE-TOTAL FETUS;

MEDLINE;

FORMAS R., KLEMSZ M., KRAIHWOHL M., FIFE K., COOPER S.,

HROMAS R., KIM C.H.,

SCHNIZLEIN-BICK C., BROXMEYER H.E.;

ISOLATION and characterization of Exodus-2, a novel C-C chemokine

with a unique 37-amino acid carboxyl-terminal extension.";

J. IMMUNOL. 159:2554-2558(1997).
                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 97400322.
HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.: SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                 Length 133;
                                                 Match 76.9%; Score 70; DB 11; Length 133 Local Similarity 58.3%; Pred. No. 6.38e-03; Local Similarity 58.3%; Pred. No. 6.38e-03; Local Similarity 4; Mismatches 1; Indels nes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                          01-JUL-1997 (TREMBLREL. 04, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U88322; G3169697; -
EMBL; U801:1097677; SCYA21
PFAM; PF00048; i18; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT; 134 AA.
             133 AA; 14558 MW; C0532523 CRC32;
                                                                                                                                                                                                                                                                    PRT; 133 AA.
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Best Local Similarity 58.3%;
Matches 7; Conservative
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1 QVCADPSESWVQ 12
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000585
000585;
                           SEQUENCE
                                                                                                                                                                                                                                                         LT 5
009006
009006;
                                                                   Query Match
                                                                                                                 Matches
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MUS MUSCULUS (MOUSE).
EUKRRYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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MUS MUSCULUS, EUTHERIA; RODENTIA; MAMMALIA; EUTHERIA; RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J., PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J., GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J., GUTIERREZ-RAMOS J.C., GERRING D.; "NEUTCHEACTIN, a membrane-anchored chemokine upregulated in brain inflammation.";
NATURE 387:611-617(1997).
NATURE 387:611-617(1997).
MGI:1097153; SCYD1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                         LEGUENCE FROM N.A.
NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S.,
NAGIRA M., KARIZAKI M., NOMIYAWA H., YOSHIE O.;
NISHIMURA M., KARIZAKI M., NOMIYAWA H., YOSHIE O.;
SUBMITUTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, 1088320; G2196920; -.
EMBL, AR001979; G2634925; -.
EMBL, AR001979; D1022673; -.
PFRAM; PF00048; il8; l.
SEQUENCE 134 AA; 14646 MW; FE86A239 CRC32;
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Pred. No. 2.76e-02;
Virmatrhes 2; Indels
                                                                                                                                                                                                                                                                               Score 67; DB 4; Length 134;
Pred. No. 2.76e-02;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
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Best Local Similarity 80.0%;
                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 66.7%;
Matches 8; Conservative
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                                                                                                                                                                                                 MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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0
                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              y Match 72.5%; Score 66; DB 11; Length 97;
Local Similarity 70.0%; Pred. No. 4.47e-02;
hes 7; Conservative 2; Mismatches 1; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-GA;

MEDILINE; 96074534.

PENG Q., ZENG M., BHUIYAN Z.A., UBUKATA E., TANAKA A., NONOYAMA M., SHIRAZI Y.;

"Isolation and characterization of Marek's disease virus (MDV) cDNAs mapphing to the BamHI-12, BamHI-02, and BamHI-L fragments of the MDV infected with MDV.";

VIROLOGY 213:590-599(1995).

EMBL; U34966; G1185444; -.
                                                             ó
                                                                                                                                                                                                                                                           LESSLAUER W.,
"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
                                        Length 395;
                                 Score 67; DB 11; Length 395,
Pred. No. 2.76e-02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                        VILLARES R.;
SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF055313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                     089093;
01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ECO Q PROTEIN (FRAGMENT).

GALLID HERPESVIRUS TYPE 1.
VIRUSES: DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
ALPHAHERPESVIRINAE; VARICELLOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
PFAM; PF00048; i18; 1.
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
                                                                                                                                                                                                                                                                                                                                                                            POTENTIAL.
CC CHEMOKINE ST38.
053405BD CRC32;
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SEQUENCE 97 AA; 10826 MW;
                            Query Match
Best Local Similarity 80.0%;
Matches 8; Conservative
                                                                                                                                 PRELIMINARY;
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                                                                    74 CADPKEKWVQ 83
                                                                                       3 CADPSESWVQ 12
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Q67634
Q67634;
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CATARRHINI; HOMINIDAE; HOMO.
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CATARRHINI; HOMINIDAE; HOMO
                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Structure of a region of 181 kb containing five CC chemokine genes.";
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SEQUENCE FROM N.A.
PATEL V.P., KRRIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
NARDELLI B., PIPPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.,
GENIZ R., GAROTTA G.;
J. EXP. MED. 0:0-0,0,
EMBL; U85768; G1916252;
PFAM: PFO0048; i18; 1.
SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;
                                                    Match 72.5%; Score 66; DB 14; Length 203; Local Similarity 63.6%; Pred. No. 4.47e-02; les 7; Conservative 1; Mismatches 3; Indels
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0
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Pred. No. 7.20e-02;
2; Mismatches 3; Indels
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Query Match

Best Local Similarity 58.3%; Pred. No. 7.20e-02;

Matches 7; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF043341; G2905632; --
EMBL; AF088219; G3719366; --
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                            01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
RANTES PRECURSOR.
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
NON_TER 1 1
SEQUENCE 203 AA; 23132 MW; 887D04C3 CRC32;
                                                                                                                                                                                                                                                        91 AA.
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CHAIN 24 91
SEQUENCE 91 AA; 9990 MW;
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similarity 58.3%;
7; Conservative
                                                                                                                                                                                                                                                PRELIMINARY;
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                                                                                                                            145 VCVDPEAPWVQ 155
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                                                                                                                                                                    2 VCADPSESWVQ 12
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                                                      Query Match
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043646
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ID 000175
AC 000175;
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STROMGYLOCENTROTUS PURPURATUS (PURPLE SEA URCHIN).
EUKARYOTA; METAZOA; ECHINODERMIA; ECHINOZOA; ECHINOIDEA; EUECHINOIDEA;
ECHINACEA; ECHINOIDA; STRONGYLOCENTROTIDAE; STRONGYLOCENTROTUS.
                                                                                                                                                                                                     CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 98119758.
GINGRAS D., GAGNON C.;
GINGRAS D., GAGNON C.;
GINGRAS D., GAGNON C.;
MOLLable cloning and characterization of a radial spoke head
"Moltan cloning and characterization of a radial spoke head
protein of sea urchin sperm axonemes: involvement of the protein in
the regulation of sperm motility.";
MOL. BROL. CELL 9:131-522(1998).
EMBL; U73123; G295895; ---
EMBL; U73123; G295895; ---
EMBL; U73123; G295895; ---
EMBL; U73123; G295895; ---
EMBL; G2723 MW; 898CFCCC CRC32;
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                                                                                                                                                                                                                                                                                                                              "Cloning and characterization of exodus, a novel beta-chemokine.";
BLOOD 89:3315-3322(1997).
EMBL: U64197; G1778177;
EMBL: PS000475; SMALL_CYTOKINES_CC: 1.
PFAM: PF00048; 118: 1.
SEQUENCE 95 AA: 10691 MW: 1526B4C0 CRC32;
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Pred. No. 1.16e-01;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                  01.MAY-1997 (TREMBLREL. 03, CREATED)
01.MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01.NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Mismatches
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01-NOV-1998 (TREMBLREL. 08, CREATED)
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Best Local Similarity 50.0%;
Matches 5; Conservative
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CATARRHINI; HOMINIDAE; HOMO.
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Best Local Similarity 60.0%;
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| QVCADPSESWVQ 12
                        72 QFCGDPKQEWVQ 83
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2 VCADPSESWV 11
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MEDLINE; 97275143.
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046178;
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CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
BUKARYOTA, METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                             "Activated murine B lymphocytes and dendritic cells produce a novel CC chemokine which acts selectively on activated T cells."; CT EXP. MED. 188:451-463(1998).

EMBL; AF052505; G3378116; -. SEQUENCE 92 AA; 10302 MW; BC7219A0 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                     MEDLINE; 9835351.
SCHAMIEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C.,
SHIMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G.,
SIDERAS P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
68.1%; Score 62; DB 11; Length 92;
Best Local Similarity 54.5%; Pred. No. 2.94e-01;
Matches 6; Conservative 3; Mismatches 2; Indels
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Search completed: Fri Feb 4 17:35:01 2000
                                                                                                                                            SCIUROGNATHI; MURIDAE; MURINAE; MUS
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Fri Feb 4 17:39:54 2000; MasPar time 5.06 Seconds 129.377 Million cell updates/sec

Tabular output not generated.

Title: >US-09-150-813-65
Description: (1-12) from US09150813.pep
Perfect Score: 96
Sequence: 1 EICADPKEKWVQ 12

Scoring table: PAM 150 Gap 15 Searched: 179066 seqs, 54579741 residues

Post-processing: Minimum Match 0% Listing first 45 summaries Database: sptremb19
1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human
1:sp_archea 2:sp_bacteria 3:sp_mnhc 8:sp_organelle
5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle
9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified
13:sp_vertebrate 14:sp_virus

Statistics: Mean 25.653; Variance 35.991; scale 0.713

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	1.61e-05 2.02e-04 2.02e-04 2.36e-03 3.84e-03 3.84e-03 6.22e-03 1.61e-02 2.58e-02 2.58e-02 4.12e-02 4.12e-02 4.12e-02 6.55e-02
Description	NEUROTACTIN. PERACTAKINE. BETA CHEWOKINE EXODUS- LD78 ALPHA BETA PRECUR LL-10-INDUCIBLE CHEMOK MPIF-2. CC CHEMOKINE ST38 PREC CC CHEMOKINE ABCD-1. CX3C CHEMOKINE PRECURS LYMPHOTACTIN PRECURSOR BETA CHEMOKINE EXODUS. CHEMOKINE EXODUS. CHEMOKINE EXODUS. CC CHEMOKINE EXODUS. INTERLEUKIN-8 (FRAGMEN B LYMPHOCYTE CHEMOATTR RANTES PRECURSOR. MACROPHAGE-DERIVED CHE CC CHEMOKINE-1.
QI QI	035188 000583 000585 014745 015467 001175 089030 089430 P78423 057411 0590664 009002 009002 0090664 003338 062812 062812 062812 062812
* Query Match Length DB	395 11 395 11 80 4 80 4 120 4 119 14 97 14 97 13 133 11 133 11 133 11 96 11 96 11 97 16 97
* Query Match L	87.5 87.5 87.5 78.1 77.1 75.0 75.0 71.9 71.9 71.9 71.9 71.9 71.9 71.9 71.9
Score	884 448 771 711 711 711 711 711 711 711 711 71
Result No.	112 113 113 114 114 117 118 119

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ALIGNMENTS

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	EUTHERIA; RC	CULPEPPER CULPEPPER ed in brain		gth 395; Indels 0;			EUTHERIA;
DATE) UPDATE)	MMALIA; EU	A. , HONG Z., DOLICH S., DEEDS J., GONZALO J., DUSSAULT B., WOOLF B., ALFERIN A., O.J.C., GEARING D., membrane-anchored chemokine upregulated	32;	Len , 0;		A. UPDATE) N UPDATE)	MAMMALIA;
; 395 AA. ED) SEQUENCE UPDATE) ANNOTATION UPDATE)	EBRATA; MA S.	S., DEEDS OOLF B., A	E3CD0612 CRC32;	Score 84; DB 11; Pred. No. 1.61e-05 1; Mismatches		;; 395 AA. EED) SEQUENCE UPDATE) ANNOTATION UPDAT	KTEBRATA; IUS.
PRT; 05, CREATED) 05, LAST SEG 08, LAST ANN	ATA; VERT) RINAE; MU	, DOLICH NULT B., W RING D.;	 MW;			PRI 05, CREAT 05, LAST	RDATA; VER
PRELIMINARY; (TREMBLREL. 0) (TREMBLREL. 0 (TREMBLREL. 0	SOLDI. SULDIS (MOUSE). EUKARYOTA, METAZOA: CHORDATA: VERTEBRATA; MAMMALIA: SCIUROGNATHI; MURIDAE: MURINAE; MUS.	[1] SECUENCE FROM N.A. MEDLINE; 97320499. PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH PAN Y., CLARE L., HONG Z., WOOLF B., ALPERIN A., CULPEPPER GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER GOTIERREZ-RAMOS J., GEARING D.; "Neurotactin, a membrane-anchored chemokine upregulated in brain "Neurotactin, a membrane-anchored chemokine upregulated in brain	inflammation."; NATURE 387:611-617(1997). EMBL, AF010586; G2317698; MGD, MGI:1097153; SCYDI. PFAM: PF00048; 118; 11. SEQUENCE 395 AA; 42098	87.5%; Similarity 90.9%; 10; Conservative	3KWVQ 83 EKWVQ 12	PRELIMINARY; (TREMBLREL. (TREMBLREL.	·SEH
1 35188 35188; 1-JAN-1998 1-JAN-1998 1-NOV-1998	SCIDI. MUS MUSCULUS (MOUSE). EUKARYOTA; METAZOA; C	SEQUENCE FROM N. SEQUENCE FROM N. MEDLINE; 9732049 PAN Y., CLARE L. GOSSELIN M., MA GUTIERREZ-RAMOS "Neurotactin, a	inflammation."; NATURE 387:611-6 EMBL; AF010586; MGD; MGI:1097153 PFAM; PF00048; J SEQUENCE 395 P	Query Match Best Local Simi Matches 10;	73 FCADPKEKWVQ :	035933 035933; 01-JAN-1998 01-JAN-1998	O1-NOV-1998 (IREMEDIAE FRACTALKINE. MUS MUSCULUS (MOUSE). EUKARYOTA: METAZOA: C SCIUROGNATHI; MURIDAE
M	00 00 00 00	RN RX RA RA	RT DR DR SQ	On Be	Db	RESULT ID O AC O DT 0	OC OC

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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
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01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1999 (TREMBLREL. 09, LAST SEQUENCE UPDATE)
1D/8 ALPHA BETA PRECURSOR (FRAGMENT).
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAGIRA M., INGL.
NAGIRA M., INGL.
NAGIRA M., INGL.
NISHIMURA M., INGL.
NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.;
ENBLIZO (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF001979; G2624920; ---
EMBL; AF001979; G2624925; ---
EMBL; AF001979; G2624925; ---
EMBL; AF001409; D1022673; ---
EFRAM; PF00048; 118; 1.
SEQUENCE 134 AA; 14646 MW; FE86A239 CRC32;
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STRAIN-BALB/C; TISSUE-BRAIN;
STRAIN-BALB/C; TISSUE-BRAIN;
ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
BABL; U92565; G2459677; -..
SEQUENCE 395 AA; 42040 MW; 3997AII3 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDRICK J.A., JULINIK A.;
"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. INMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·
0
                                                                                                                                     Match 87.5%; Score 84; DB 11; Length 395; Local Similarity 90.9%; Pred. No. 1.61e-05; les 10; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82.3%; Score 79; DB 4; Length 134;
83.3%; Pred. No. 2.02e-04;
rative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                         SECUENCE FROM N.A.
HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                          1-JUL-1997 (TREMBLREL. 04, LAST SEÓGENCE UPDATE)
1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                       134 AA.
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01-JUL-1997 (TREMBLREL. 04, TASE CL
                                                                                                                                                                                                                                                                                                   PRT;
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nes 10; Conservative
                                                                                                                                                                                                                                                                                              PRELIMINARY;
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                                                                                                                                                                                                   73 FCADPKEKWVQ 83
                                                                                                                                                                                                                                2 ICADPKEKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EICADPKEKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 ELCADPKELWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                          Query Match
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000585
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Q14745
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with myelosuppressive
                                               ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K.,
KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R.,
MIYAKAWA T.;
                                                                                                                                                                                                                                                          ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                Score 75; DB 4; Length wv,
Pred. No. 1.46e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 74; DB 4; Length 120;
Pred. No. 2.37e-03;
                                                                                 SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; D63785; D1010501; -. PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
SUEMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                               01 JAN 1998 (TREMBLREL. 05, CREATED)
01-JAN 1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
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BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
EMBL. BOD0745; G2581781; -.
EMBL, AD080745; D1024663; -.
EMBL, AF088219; G37193465; -.
EMBL, AF088219; G37193465; -.
EMBL, AF080819; 13716; -.
                                                                                                                                                                           LD78 ALPHA BETA.
                                                                                                                                                                                                   3F87F1C6 CRC32;
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                                                                                                                                                                                                                                                                                                                                                   120 AA.
                                                                                                                                                               POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                  PRT;
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<1 16
17 >80
80 80
80 AA; 8857 MW;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cuery Match
Best Local Similarity 50.0%;
                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                    65 QVCADPSEEWVQ 76
                                                                                                                                                                                                                                                                                    1 EICADPKEKWVQ 12
                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                Local Similarity
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SEQUENCE
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SIGNAL
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015467
015467;
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73 FCADPKEQWV 82
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                                                                    CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                        74 DICADPROVWV 84
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                                                                                                                           SEQUENCE FROM N.A.
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SIGNAL
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P78423
   LT 8
088430
088430;
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EURAKYOTA: METAKOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                                                                                                                        HOMO SAPIENS (HUMAN).
EUKAKYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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  Gaps
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"A novel rat Cc chemokine, identified by targeted differential display, is upregulated in brain inflammation.";

J. NEDROLHMUNOL. 0:0-0(1998).
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PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
PATEL V.P., RREIDER B.L., LI Y., LI HOTAKURA R., PARMELEE D.,
NARDELLI B., PIPPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.,
J. EXP. MED. 0.0-0(0).
J. EXP. MED. 0.0-0(0).
EMBL; U85768; G1916255; -
PFAM, PF00048; I18; 1.
PFAM, PF00048; 118; 1.
PFAM, PF00048; LIB, 1.
SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 75.0%; Score 72; DB 11; Length 97; Local Similarity 70.0%; Pred. No. 6.22e-03; Local Similarity 7; Conservative 3; Mismatches 0; Indels les
                                                                                                                                                                                                                                                                                                      Score 73; DB 4; Length 119;
Pred. No. 3.84e-03;
4; Mismatches 1; Indels
      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; APO53313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      08, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                               01-10-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-JUL-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C CHEMOKINE ST38.
053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                          97 AA.
      5; Mismatches
                                                                                           PRT; 119 AA.
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01-NOV-1998 (TREMBLREL. 08, LAST SEGU
01-NOV-1998 (TREMBLREL. 08, LAST ANNC
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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28 97
97 AA; 10826 MW;
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Best Local Similarity 58.3%;
Matches 7; Conservative
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         6; Conservative
                                                                                                 PRELIMINARY;
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1 EICADPKEKWVO 12
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2 ICADPKEKWV 11
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                               74 EVCTNPNDDWVQ 85
                                                   1 EICADPKEKWVQ 12
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089093
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000175
000175;
             Matches
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
SEQUENCE FROM N.D., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M.,
BRANDON R., KIM U.J., KRELAVER A.R., VENTER J.C.;
HOMO SAPLENS CHIOMOSOME 16 BAC CLIONE CIT987SK-A-152E5.";
"HOMO SAPLENS CHIOMOSOME 16 BAC CITORORY DATA BANKS.
ENBL; 01835; G1895259; ---
ENBL; NG487; G188523; ---
ENBL; ACO04382; G3252821; ---
FRHAL; ACO04382; G3252821; ---
FPRM; PF00048; 118; 1.
                                                                                                                                                       EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                                                                                                                                                                                                                                                                                                                                                         "Activated murine B lymphocytes and dendritic cells produce a novel cc chemokine which acts selectively on activated T cells."; CC chemokine which acts selectively on activated T cells."; J. EXP. MED. 188.451-463(1998).

EMBL, AF052505; G3378116; -...
SEQUENCE 92 AA; 10302 MW; BC7219A0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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"A new class of membrane-bound chemokine with a CX3C motif.";
NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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                                                                                                                                                                                                                                                                     MEDLINE; 98353531.
SCHANTEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C.,
SHIMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G.,
SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 397;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 71; DB 11; Length 92;
Pred. No. 1.00e-02;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P18423: 000672:
01-MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-MAY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
03.3C CHEMOKINE PRECURSOR.
                                            01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C8093D7D CRC32;
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92 AA.
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     PRT;
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25 397 C
397 AA; 42202 MW;
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Best Local Similarity 80.0%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74.0%;
Local Similarity 63.6%;
les 7; Conservative
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        PRELIMINARY;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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0
                                                                                  GALLUS GALLUS (CHICKEN),
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
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Pred. No. 2.58e-02;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 69; DB 11; Length 133;
Pred. No. 2.58e-02;
2; Mismatches 2; Indels
                                                                                                                                                           ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL: AF006742; G2827882;
                                 01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
LYMPHOTACTIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U88322; G3169697; -
MGD; MGI:1097677; SCTA21.
PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                        01-JUL-1997 (TREMBLREL. 04, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                POTENTIAL.
LYMPHOTACTIN.
3290101C CRC32;
                     97 AA.
                                                                                                                                                                                                                                                                                                                                                                                           PRT; 133 AA.
                                                                                                                                                                                                           SIGNAL 1 24 CHAIN 25 97 SEQUENCE 97 AA; 11131 MW;
                                                                                                                                                                                                                                                               / Match
Local Similarity 63.6%;
les 7; Conservative
              PRELIMINARY;
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Best Local Similarity 66.7%;
Matches 8; Conservative
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                                                                                                                                                                                                                                                                                                                                   2 ICADPKEKWVQ 12
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TISSUE-TOTAL FETUS;
MEDLINE; 97444139.
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| EICADPKEKWVQ 12
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                                                                                                                                                  TISSUE=SPLEEN
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009006;
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PRT; 133 AA.

PRELIMINARY;

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MUS WUSCULUS (MOUSE).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                                                                                                                             TANABE S., IU Z., LUO Y., QUACKENBUSH E.J., BERWAN M.A., COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A., DORF M.E.; SUBMITTED (JUN-1997) TO EWBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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MEDLINE; 97275143.
HEROMAS R., GRAY P., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K., GROXNEYER H.C., TAKEDA J., ARONICA S., GORDON M., COOPER S., "CLOSING and Characterization of exodus, a novel beta-chemokine."; EMBL; U64197; G1778717; PROSITE; PROSITE; PRO0472: SMALL_CYTOKINES_CC; 1.
PROSITE; PRO048; i18; 1.
SEQUENCE 95 AA: 10691 MW; 152684C0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                             HEDRICK J.A., ZLOTRIK A.,
"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó,
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                                                                                                                                                                                                                                                                                                                                                                                                                                           71.9%; Score 69; DB 11; Length 133 66.7%; Pred. No. 2.58e-02; ortive 2; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                           L9.1

BEDURICE FROM N.A.

HEDRICK J.A., ZLOTNIK A.;

SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

EMBL; AF001980; G2624927; -.

MGD; MGI:1097677; SCXA21.

PFAM; PF00048; i18; 1.

SEQUENCE 133 AA; 14558 MW; C0532523 CRC32;
           01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
SMALL INDUCIBLE CYTOKINE A21 (TCA4).
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LAST ANNOTATION UPDATE)
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01-MAY-1997 (TREMBLREL. 03, LAST SEQU
01-NOV-1998 (TREMBLREL. 08, LAST ANNC
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| EICADPKEKWVQ 12
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                                                                                      RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
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"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
EMBL: 040447; 761899246; -.
EMBL: AF053312; G3551877; -.
PPAM; PF00048; i18; 1.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 70.8%; Score 68; DB 6; Length 97; Local Similarity 58.3%; Pred. No. 4.12e-02; nes 7; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN-FISHER 344; TISSUE-BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                               Score 68; DB 11; Length 96; Pred. No. 4.12e-02; 2; Mismatches 1; Indels
                                                                                                                                                              STRAIN-SPRAGUE-DAWLEY:
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=BRONCHOALVEOLAR TISSUE;
FRANCHINI M.;
SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF062377; G3126973; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 (FRAGMENT).
                                 01-MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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         96 AA.
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          PRT;
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Best Local Similarity 70.0%;
Matches 7; Conservative
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| EICADPKEKWVQ 12
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2 ICADPKEKWV 11
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Fri Feb 4 17:38:48 2000; MasPar time 3.57 Seconds 134.609 Million cell updates/sec

Tabular output not generated.

Title: >US-09-150-813-65
Description: (1-12) from US09150813.pep
Perfect Score: 96
1 EICADPKEKWVQ 12

Sequence: 1 EICADPREKWVQ Scoring table: PAM 150 Gap 15 Searched: 122810 seqs, 40068593 residues

Post-processing: Minimum Match 0% Listing first 45 summaries Database: pir60 1:pir1 2:pir2 3:pir3 4:pir4 pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 24.896; Variance 35.903; scale 0.693

Statistics:

SUMMARIES

Pred. No.	9.81e-08 1.55e-07 1.30e-06 2.17e-06 2.17e-06 2.17e-06 2.17e-06 3.52e-06 3.62e-06 6.01e-06 6.01e-06 9.96e-06 9.96e-06 1.65e-05 1.65e-05 1.20e-04
Description	monocyte chemoattract monocyte chemoattract monocyte chemoattract interleukin 8 dog interleukin 8 sheep interleukin 8 ribeep interleukin 8 recurs alveolar macrophage inflammato macrophage inflammato monocyte chemoattract monocyte chemoattract monocyte chemoattract interleukin 8 reabbi monocyte chemoattract ectaxin precursor r ectaxin precursor
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DB	папапапапапапапапапапапа
Length I	99 99 99 99 95 101 101 103 103 99 99 99 96 96 96 96 96 97 98
% Query Match L	996.995.8996.9997.9996.9996.9999.9999.09999.09999.09999.099999999
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A31767 A30574 B35673 S07723	148148 JE0177 A53416 153416 181182 G01540 1186730 146730 ETMSE A28815 S55520 C30552 A48093 A26736	ETHUL F69804
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24 25 26	00000000000000000000000000000000000000	444

ALIGNMENTS

#type complete monocyte chemoatractant protein 1 precursor - human monocyte chemoatractant protein 1 precursor - human monocyte chemoatractant chemotactic factor 1; MCP-1; glioma-derived monocyte chemotactic factor 1; MCP-1; monocyte chemotactic factor 2 (GDCF-2) glioma-derived chemotactic factor 2 (GDCF-2) #formal_name Homo sapiens #common_name man #formal_name Homo sapiens #common_name man 20.Peb-1993 #text_change 20.Peb-1993 #text_change	ESSIONS A35474; A33476; S03339; I51841; A60299; A32350; A32350; A32550; A34561; I57488; JC1096 ERENCE A35474 X.J.; Li, Y.S.; Kolattukudy, P.E. Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E. Blochem. Biophys. Res. Commun. (1990) 169:346-351 # journal Structure of human monocyte chemotactic protein gene and its regulation by TPA. # cross-references MUD:90290466	haccession A334 by #label SHY #rcss.references GB:M37719; NID:g187447; PID:g487124 #rcss.references GB:M37719; NID:g187447; PID:g487124 #rcss.references GB:M37719; NID:g187447; PID:g487124 #rcss.references GB:M37719; NID:g187467; PID:g487124 #rcss.references GB:M37719; NID:g188701; Entitle	S0339 Yoshimur Yoshimur Human mc Human mc CDNA c monon CONPet S03339 Ile_type mr es
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A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and activating factor (MCP-1/MCAF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, T.; Yamada, M.; Larsen, C.G.; Oppenhelm, J.J.; Matsushima, K. Biochem. Biophys. Res. Commun. (1989) 159:249-255
Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #journal Biochem. Biophys. Res. Commun. (1990) 167:904-909

#title Identification of the monocyte chemotactic protein from human steepers. Arterminally processed form. Heross-references MUID:90211336

#accession A34561
                                                                                                                                                                                                                                                                     Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #authors Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
#journal Mol. Cell. Blochem. (1993) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1) in human vascular endothellum in vitro and in vivo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.; Appella, E. Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1850-1854 Complete amino acid sequence of a human monocyte chemoatrractant, a putative mediator of cellular immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van
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#cross-references MUID:92095166
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                                                                                                                                                             preliminary; translated from GB/EMBL/DDBJ
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##cross-references GB:S71513; NID:9240867; PID:9240868
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                                             Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. (1991) 305:47-56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ##molecule_type protein
##residues 29-33,'XX',36-52;82-92 ##label DEC
##experimental_source glioma cell line U-105MG
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*product monocyte chemoattractant protein 1, short form *status experimental *label MAT2\
*modified_site pyrrolidone carboxylic acid (Gln) (in mature form) *status experimental\
*binding_site carbohydrate (Asn) (covalent) *status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             monocyte chemoattractent protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
                                                                                                                                                                                                                            #domain signal sequence #status predicted #label SIG\
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biochem. Biophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
                                                                                                                                                                                                                                                  #product monocyte chemoattractant protein 1 #status experimental #label MAT\
                                                                                                                             *map_position 17911.2-17912
CLASSIFICATION **upperfamily macrophage inflammatory protein
KEYWORDS cytokine; glycoprotein; inflammation; pyroglutamic acid
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#product monocyte chemoattractant protein-1 #status
predicted #label MAT\
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#length 99 #molecular-weight 10976 #checksum 9768
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*length 99 #molecular-weight 11025 #checksum 7984
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submitted to the EMBL Data Library, July 1994
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95.8%; Score 92; DB 2; Length 99;
Best Local Similarity 83.3%; Pred. No. 1.65e-07;
Matches 10; Conservative 2; Mismatches 0; Indels
chemoattractant protein-1 (MCP-1) gene.
                              ##molecule_type mRNA
##residues 24-28,'Q',30-99 ##label YEQ
                                                                                                                    ##cross-references GDB:125279; OMIM:158105
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                                                                                                GDB:SCYA2
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Ishikawa, J.; Suzuki, S.; Hotta, K.; Hirota, Y.; Mizuno, S.; Suzuki, K. Gene (1993) 131:305-306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This protein is a polymorphonuclear leukocyles chemotactic factor and is involved in the host defense function.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 146997 #type complete
interleukin-8 - sheep
#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
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06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
08-Sep-1997
                                                                                                                                                     #formal_name Canis lupus familiaris #common_name dog
19-May_1994 #sequence_revision 19-May-1994 #text_change
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#formal_name Ovis orientalis aries, Ovis ammon aries
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#length 95 #molecular-weight 10611 #checksum 3157
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Pred. No. 2.17e-06;
1; Mismatches 1; Indels
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Local Similarity 83.3%; Pred. No. 2.17e-06;
hes 10; Conservative 1; Mismatches 1.
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##molecule_type DNA
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu cattle
#formal_name Bos primigenius indicus #common_name zobs primigenius indicus #common_name zebu cattle
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#product monocyte chemoattractant protein 1 #status
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DNA Cell Biol. (1991) 10:671-679

Gene expression and cDNA cloning identified a major basic
protein constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).
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##molecule_type mRNA
##residues
##cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
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91.7%; Score 88; DB 2; Length 99;
Best Local Similarity 83.3%; Pred. No. 1.30e-06;
Matches 10; Conservative 2; Mismatches 0; Indels
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2; Mismatches 0; Indels
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##residues 1-99 ##label WEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein-1 gene.
#cross-references MUID:94338337
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Best Local Similarity 83.3%;
10; Conservative
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                                                1 EICADPKEKWVO 12
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Seow, H.F.; Yoshimura, T.; Wood, P.R.; Colditz, I.G. Immunol. Cell Biol. (1994) 72:398-405 Cloning, sequencing, expression and inflammatory activity in section of the contract of the contrac
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#formal_name Sus scrofa domestica #common_name domestic pig
02-jun-1995 #sequence_revision 02-jun-1995 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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Molecular cloning of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porcine IL-8 and another intercrine-alpha protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, #journal J. Biol. Chem. (1994) 269:77-85
#title Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #superfamily beta-thromboglobulin
#length 101 #molecular-weight 11292 #checksum 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##residues 1-103 ##label LIN
##cross-references GB:M86923; NID:g164520; PID:g164521
FICATION #superfamily beta-thromboglobulin

"X #length 103 #molecular weight 11633 #checksum 8835
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                                                                                                                                                                                                                                                                                        preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90.6%; Score 87; DB 2; Length 101; 83.3%; Pred. No. 2.17e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
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Pred. No. 2.17e-06;
                                                                                                                                                                                                                                                                                                                                             ##residues 1-101 ##label SEO
##cross-references GB:S74436; NID:9786590; PID:9786591
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les 10; Conservative
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Local Similarity 83.3%;
les 10; Conservative
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#journal J. Immunol. (1991) 146.3488-3488

*title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their #cross-references WIID:91225489
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               ##status
##status
##molecule_type mRNA; protein
##tesidues
1-103 ##label GOO
##texperimental_source alveolar macrophage
sequence asyenence areacted from NCBI backbone (NCBIN:117415,
NCBIP:117416)
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#formal_name Oryctolagus cuniculus #common_name domestic
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#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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Blochem. Blophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
                                                                                                                                                                                                                              CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 103 #molecular-weight 11677 #checksum 8904
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#length 125  #molecular-weight 13776  #checksum 4498
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CLASSIFICATION #superfamily macrophage inflammatory protein
SUMMARY #length 92 #molecular-weight 10335 #checksum 3184
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Pred. No. 2.17e-06;
1; Mismatches 1; Indels
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Pred. No. 2.17e-06;
1; Mismatches 0; Indels
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#cross-references MUID:95298037
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#accession
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The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
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#product monocyte chemotactic protein 3 #status
predicted #label MAT\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #journal Biochem. Biophys. Res. Commun. (1993) 191:535-542
#title Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and comparison with other chemokines. #cross-references MUID:93213290
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                                                   Gaps
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##residues 1.109 ##label MIN
##cross-references EMBL:X71087; NID:9288396; PID:9288397
WT This protein induces proteinase secretion and chemotaxis by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #molecular-weight 12356 #checksum 1535
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83.3%; Pred. No. 3.62e-06;
vative 1; Mismatches 1; Indels
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cytokine; glycoprotein; inflammation
                                                 1; Indels
            DB 2; Length 92;
            Score 86; DB 2; Le
Pred. No. 3.62e-06;
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#map_position 1/q11-1/q12
#introns 36/1; 75/2
                                                       1; Mismatches
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##residues 1-109 ##label OPD
##cross-references GB:X72309
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#cross-references MUID:94375065
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Matches 10; Conservative
                  89.68;
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                                                       10; Conservative
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83 EICADPTQKWVQ 94

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This protein belongs to the beta-chemokine family which is one of the major HV-suppressive factors. It plays roles in autoimmune processes such as multiple sclerosis and rheumatoid arthritis and in tunor biology, and contribute to the trafficking and recuitment of the responsive cells.
                                                                                                                                                                   Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroeder, J.M. Biochem. Biophys. Res. Commun. (1996) 225:1045-1051 Human dermal fibroblasts express ectaxin: Molecular cloning, mRNA expression, and identification of ectaxin sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #authors van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G. #journal Blochem. Blophys. Res. Commun. (1997) 231.726-730 #title Human monocyte chemotactic protein-2: cDNA cloning and regulated expression of mRNA in mesenchymal cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                         ##cross-references EMBL:275668; NID:g1531982; PID:e251275; PID:g1531983 ##experimental_source dermal fibroblast or This protein has eosinophil specific chemotatic activity. FPICATION #superfamily macrophage inflammatory protein to fibroblast fibroblast
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monocyte chemotactic protein-2 precursor - human
#formal_name Homo sapiens #common_name man
02-May-1997 #sequence_revision 18-Jul-1997 #text_change
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                                     #formal_name Homo sapiens #common_name man
#formal_name Homo sapiens #common_name man
01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change
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#type complete
                             human
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                             eotaxin precursor -
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ilarity 75.0%; F
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JC2417
JC2417
Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
                                                                                                                                                                                                     JC2417 #type complete
monocyte chemoattractant protein-2 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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88.5%: Score 85; DB 2; Length 99;
Best Local Similarity 75.0%; Pred. No. 6.01e-06;
Matches 9; Conservative 3; Mismatches 0; Indels
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##molecule_type mRNA
##residues
1-199 ##label HOS
##experimental_source corpus luteum
FEATURE
FEATURE
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#cross-references MUID:95091716
                                                                             73 EVCADPKERWVR 84
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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:45:38 2000; MasPar time 5.03 Seconds 130.258 Million cell updates/sec Tabular output not generated.

>US-09-150-813-66 (1-12) from US09150813.pep 95 1 EICADPTQKWVQ 12 Description: Perfect Score: Title:

PAM 150 Gap 15 Scoring table:

Sequence:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

sptrembl9
1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human
1:sp_archea 2:sp_bacteria 7:sp_mhc 8:sp_organelle
5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle
9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified
13:sp_vertebrate 14:sp_virus

Mean 25.123; Variance 34.142; scale 0.736 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	5.57e-04	9.23e-04	9.25e-04	2.53e-03	6.81e-03	6.81e-03	1.11e-02	1.11e-02	1.11e-02	1.11e-02	2.94e-02	4.76e-02	7.66e-02	7.66e-02	7.66e-02	7.66e-02	3.13e-01	4.96e-01	4.96e-01	7 830-01	1000
Description	LD78 ALPHA BETA PRECUR	NEUROTACTIN.		LYMPHOTACTIN PRECURSOR	ORF K6.	MPIF-2.	CC CHEMOKINE ABCD-1.	CC CHEMOKINE ST38 PREC	IL-10-INDUCIBLE CHEMOK	BETA CHEMOKINE EXODUS-	RANTES PRECURSOR.	INTERLEUKIN-8 (FRAGMEN	CHEMOKINE EXODUS.	CC CHEMOKINE EXODUS.	BETA CHEMOKINE EXODUS-	SMALL INDUCIBLE CYTOKI	CC CHEMOKINE-1.	K60 PROTEIN PRECURSOR.	B LYMPHOCYTE CHEMOATTR	REPORTED TO STREET OF STREET	MACKOPHAGE DEKIVED ONE
ID	014745	035188	035933	057411	098158	000175	088430	089093	015467	000585	043646	062812	099664	P97884	900600	00800	093238	073912	0.503.8		000626
DB	4	11	Π	13	14	7	Ξ	1	4	4	4	9	4	11	1	1		7		1	4
Query Match Length	80	395	395	97	95	119	92	97	120	134	91	97	95	96	133	133	101	100	100	1	8
Query Match	78.9	77.9	77.9	75.8	73.7	73.7	72.6	72.6	72.6	72.6	70.7	. 0	. 89	4	4	200			4.40	7. 40	63.2
Score	75	74	74	72	107	7.0	9	0 0	9 4	9	, ,	, v	2 4	ט ע	יי ני	י ע	2 0	3 0	7.5	TO	9
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7.83e-01 7.83e-01	1.23e+00	1.92e+00	1.92e+00	3.00e+00	3.00e+00	3.00e+00	3.00e+00	3.00e+00	3.00e+00	4.64e+00	4.64e+00	4.64e+00	7.15e+00	7.15e+00	7.15e+00	7 15e+00	7 150+00	1 .	7.15e+00	1.10e+01	1.10e+01	1.10e+01	1.106+01
BETA-GALACTOSIDASE (EC	BEIA-GALACIOSIDASE (EC RADIAL SPOKEHEAD.	CHEMOKINE	Q PROTEIN (FRAGM	Д,	∠	BETA GALACTOSIDASE (FR	CHITIN SYNTHETASE 1.	BETA-GALACTOSIDASE.	BETA-GALACTOSIDASE LIK	INSERTION ELEMENT IS61	PLASMA CELL MEMBRANE G	ENVELOPE GLYCOPROTEIN	14 (HRV-14) RNA SEQUEN		TTCAL 21.4	TANAMAN TONOMAN TANAMAN	TINOVALIA DINONIA	ALACTOSIDA	CODED FOR BY C. ELEGAN		~		ENVELOPE GLYCOPROTEIN.
065737 P78423	065/35	043927	067634	P70808	070460	042317	099126	023243	042150	050686	088827	097013	084776	004770	004700	000000	028318	082670	P91309	098157	081100	060287	073303
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09	0 0	0.00	200	57	57	57	57	57	7,2	. ע	א כ	י י	ה ה נ	ი i	ς C	52	55	r r	n n) L	. 4	4.5	54
21	23	* C	2,6	27	2 0	29	30.	3.5	4 6	3 0	0 6		c v	9	37	38	39	4.0		10	7 7	77	4 5

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114745, 114745, 114745, 114745, 114745, 11747456, 1174745, 1174745, 1174745, 1174745, 1174745, 1174745, 11747456, 1174745, 11747456, 11747456, 11747456, 11747456, 11747456, 11747456, 11747456, 11747456, 11747456, 11747456, 11747456, 1174	R., NARUSE K., NAKASHIWA H., OHUCHI K., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R.,	BJ DATA BANKS. BETA. RC32;	DB 4; Length 80; 5.57e-04; atches 1; Indels	; 395 AA. ED) SEQUENCE UPDATE) ANNOTATION UPDATE)
PRT; 80 AA. CREATED) LAST SEQUENCE UPDATE) LAST ANNOTATION UPDATE) RAGMENT). RAGMENT).	ARUSE K., NAI O Y., NOMIYAI	EMBL/GENBANK/DDBJ DATA CYTOKINES_CC; 1. POTENTIAL. LD78 ALPHA BETA. MW; 3F87FIC6 CRC32;	Score 75; DB 4 Pred. No. 5.57e 4; Mismatches	PRT CREAT LAST LAST
PRT; 214745. 214745. 214745. 2101-NOV-1996 (TREMBLREL. 01, CREATED) 01-NOV-1996 (TREMBLREL. 01, LAST SEQU 01-NOV-1999 (TREMBLREL. 09, LAST ANNO LD78 ALPHA BETA PRECURSOR (FRAGMENT). HOMO SAPIENS (HUMAN). EUGRARYOTA; METAZOA; CHORDATA; VERTEBR	Y., X.		tch al Similarity 58.3%; 7; Conservative OVCADPSEEWVQ 76 :: :: EICADPTGKWVQ 12	PRELIMINARY; (TREMBLREL. 05, (TREMBLREL. 05, (TREMBLREL. 08).
14745 014745 01-104-1996 (TREMBLR: 01-104-1996 (TREMBLR: 01-104N-1999 (TREMBLR: 1078 ALPHA BETA PRECHON SAPITEMS (HOWAN) EDKARYOTA; METAZOA; CATARRHINI; HOMINIDA	L1) SEQUENCE FROM N.A. TISSUE-BRAIN; ISHIZUKA K., IGATA-YI KATSURAGI S., KIN Y.,	MIYAKAWA T.; SUBMITTED (AUG-1995) TO EMBL, D63785; D1010501; PROSITE; PS00472; SYALL PFAW, PF00048; i18; 1. SIGNAL, 1 1 SIGNAL 1 16 CHAIN 17 >80 NON_TER 80 80	Ouery Match Best Local Similarity Matches 7; Conse 65 QVCADPSEEWVQ :: ::	RESULT 2 ID 035188 AC 035188; DT 01-JAN-1998 DT 01-NOV-1998 DE NEUROTACTIN GN SCYDI.
15	RR RP RA	RA RI DR DR DR KW KW FT FT SQ	DP DP OY	RESI ID AC DT DT DT CN

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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                      MEDLINE; 97320499.
PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J., GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J., GUTIERREZ-RAMOS J.C., GERARING D.; "Neurotactin, a membrane-anchored chemokine upregulated in brain inflammation.";
                                                                                                                                                                                                                                                                                            Gaps
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STRAIN-BALB/C; TISSUE-BRAIN;
STRAIN-BALB/C; TISSUE-BRAIN;
ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
ZLOTMIK A., BAZAN J.F.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL., 092565; 6345967; -.
PFAM; PF00048; 118; 1.7
SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUKARIOTA, METAZOA: CHÓRDATA: VERTEBRATA; ARCHOSAURIA; AVES;
NEOGNATHAE; GALLIFORMES: PHASIANIDAE; PHASIANINAE; GALLUS
                                                                                                                                                                                                                                                  Match 77.9%; Score 74; DB 11; Length 395; Local Similarity 72.7%; Pred. No. 9.25e-04; es 8; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 74; DB 11; Length 395;
Pred. No. 9.25e-04;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           035933;
01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF006742; G2827882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE) 01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE) LYMPHOTACTIN PRECURSOR. GALLUS GALLUS (CHICKEN).
                                                                                                                                                          NATURE 387.611.617(1997).
EMBL, AF010586, G2317698, -.
PRAD, MG110971153, SCYD1.
PPAM. PF00048, 118, 1.
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                         395 AA.
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Best Local Similarity 72.7%;
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2 ICADPTQKWVQ 12
                                                           SEQUENCE FROM N.A.
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035933
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SIGNAL
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                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUSSO J.J., BOBENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S., SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 97094384.
MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.;
"Molecular mimicry of human cytokine and cytokine response pathway
                                                                                   ;
0
                                             Score 72; DB 13; Length 97;
                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B., "Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its
                                                                                                                                                                         O91158 PRELIMINARY; PRT; 95 AA.
Q98158, 012569; TREMBLREL. 02, CREATED)
01-VUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                    NO RNA STAGE; HERPESVIRIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUN R., LIN S.-F. MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL: U75698; G1718266; -
EMBL: U74585; G1658273; -
EMBL: U74885; G2246546; -
EMBL: U71366; G3351763; -
EMBL: U71366; G3351763; -
PPAM; PF00448; 118; 1
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROC. NATL. ACAD. SCI. U.S.A. 93:14862-14867(1996).
                                                               Pred. No. 2.53e-03;
CHAIN 25 97 LYMPHOTACTIN. SEQUENCE 97 AA; 11131 MW; 3290101C CRC32;
                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10485 MW; 5283348D CRC32;
                                                                                                                                                                                                                                                                               KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS,
                                                                                                                                                                                                                                                                                                             GAMMAHERPESVIRINAE; RHADINOVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                    genes by KSHV.";
SCIENCE 274:1739-1744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pathogenicity?";
J. VIROL. 71:4187-4192(1997).
                                             / Match
Local Similarity 72.7%;
                                                                           8; Conservative
                                                                                                                                                                                                                                                                                               DSDNA VIRUSES,
                                                                                                     72 ICVHPEQKWVQ 82
                                                                                                                               2 ICADPTOKWVQ 12
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                                          Query Match
                                                                                                                                                                                                                                                                                                 VIRUSES;
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73.7%; Score 70; DB 14; Length 95;

Query Match

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7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ICADPTOKWV 11
                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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015467
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SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                        0
                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EURARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Activated murine B lymphocytes and dendritic cells produce a novel CC chemokine which acts selectively on activated T cells."; J. EXP. MED. 188:451-463(1998).
EMBL, AF052505, G3378116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                        Gaps
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MEDLINE: 9835351.
SCHANIEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C.,
SHIMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G.,
SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                                                       PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T., NARDELLI B., PIPPALLA V., GENTZ S., THOTAKURA R., PARMELEE D., GENTZ R., GAROTTA G.;
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Pred. No. 1.11e-02;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 70; DB 4; Length 119;
Pred. No. 6.81e-03;
3; Mismatches 2; Indels
    Pred. No. 6.81e-03;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                            01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. ERP. MED. 0:0-0(0).
EMBL, U85768; G1916222; -
FPAM: PF00048; il8; 1.
FROM: BF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92 AA; 10302 MW; BC7219A0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92 AA.
                                                                                                                                                                                    PRT; 119 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   O89093;
01-NOV-1998 (TREMBLREL. 08, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 72.6%;
Best Local Similarity 72.7%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 73.7%;
Best Local Similarity 58.3%;
          Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
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1 EICADPTQKWVQ 12
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1 EICADPTQKWV 11
                                                                    74 QICADPSKNWVR 85
                                                                                                           1 EICADPTOKWVO 12
                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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000175;
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ID 08
AC 08
DT 01
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                           MUS MUSCULUS (MOUSE).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE; 98308096.
YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
HANGOC G., KWON B.S.;
"Isolation and characterization of LMC, a novel lymphocyte and
monocyte chemoattractant human CC chemokine, with myelosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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SHOUDAL K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T.,
YOSHIE O., NOMIYAMA H.;
BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOMIYAMA H.; "Structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                       UTANS-SCHNETZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J., LESSLAUER W.; A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation."; J. NEUROIMMUNOL. 0:0-0(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        VILLARES R.;
SUBMITTED (ULL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF053313; G3551819; -.
EMBL; A7007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE) 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE) CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    activity.";
BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
EMBL: UG1746; G2581781; -.
EMBL: AB007454; D1024963; -.
EMBL: AF088219; G3719365; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 69; DB 11; I
Pred. No. 1.11e-02;
2; Mismatches 1;
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CC CHEMOKINE ST38.
053405BD CRC32;
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01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SECO
01-NOV-1999 (TREMBLREL. 08, LAST ANNO
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28 97
97 AA; 10826 MW;
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Best Local Similarity 70.0%;
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CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S., NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.; SUBMITYED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; WASS20; G1992620; --
EMBL; AF001979; G26A4925; --
EMBL; AR002409; D1022673; --
PFAM; PF00048; i18; 1.
SEQUENCE 134 AA; 14646 MW; FE86A239 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                       HEDRICK J.A., ZLOTNIK A.;
   "Identification and characterization of a novel beta chemokine
   containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                   Ouery Match 72.6%; Score 69; DB 4; Length 120; Best Local Similarity 50.0%; Pred. No. 1.11e-02; Matches 6; Conservative 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Match 72.6%; Score 69; DB 4; Length 134; Local Similarity 66.7%; Pred. No. 1.11e-02; Local 8; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.;
SUBMITIED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                           CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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LAST ANNOTATION UPDATE)
                                         120 AA; 13600 MW; A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CREATED)
                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
EMBL; AF055467; G3395776; -. PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                        01-JUL-1997 (TREMBLREL. 04, 01-JUL-1997 (TREMBLREL. 04, 01-NOV-1998 (TREMBLREL. 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-1998 (TREMBLREL. 06, 01-JUN-1998 (TREMBLREL. 06, 01-NOV-1998 (TREMBLREL. 08,
                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                   BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                           74 EVCTNPNDDWVQ 85
                                                                                                                                                        1 EICADPTOKWVQ 12
                                                                                                                                                                                                                                                                                               HOMO SAPIENS (HUMAN)
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| EICADPTQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73 ELCADPKELWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
JANG J.S., KIM B.E.;
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                                           SEQUENCE
                                                                                                                                                                                                             000585
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043646
043646;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEOMAS R., GRAY P.W., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K., BELL G.I., TAKEDA J., ARONICA S., GORDON M., COOPER S., BROXMEYER H.E., KLEMSZ M.J.;
"Clothing and characterization of exodus, a novel beta-chemokine.";
BLOOD 89:3315-3322(1997).

EMBL: U64197; G1778717; -.
                                                  "Structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                             EQUUS CABALLUS (HORSE).
EUKARYOTA, METAZOA, CHORDATA, VERTEBRATA; MAMMALIA; EUTHERIA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                           Score 67; DB 4; Length 91,
Pred. No. 2.94e-02;
''' amatches 2; Indels
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Pred. No. 4.76e-02;
2; Mismatches 3; Indels
                                                             Genes.";
SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF043341; G2905632; -
EMBL: AF088319; G3719366; -
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENBLITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF062377; G3126973; -.
NON_TER 97 97
SEQUENCE 97 AA; 10742 MW; 00396FBF CRC32;
                                                                                                                                                                                                                                                                                                                                                           01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                              CF404FAD CRC32;
                                                                                                                                                                                                                                                                                                                                          97 AA.
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                                                                                                                                                     POTENTIAL.
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01-MAY-1997 (TREMBLREL. 03, LAST SEQ
01-NOV-1998 (TREMBLREL. 08, LAST ANNC
                                                                                                                                                                                                                                                                                                                                            PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
TISSUE=BRONCHOALVEOLAR TISSUE;

    SIGNAL
    1
    23

    CHAIN
    24
    91

    SEQUENCE
    91 AA;
    9990 MW;

                                                                                                                                                                                                    70.5%;
Similarity 50.0%;
6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 58.3%;
Matches 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                       INTERLEUKIN-8 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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                                                                                                                                                                                                                                                       71 OVCANPEKKWVR 82
                                                                                                                                                                                                                                                                                1 EICADPTOKWVQ 12
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Best Local Similarity
                             SEQUENCE FROM N.A.
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MEDLINE; 97275143.
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                                          NOMIYAMA
                                                                                                                                                                                                                                                                                                                        LT 12
062812
062812;
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Q99664
Q99664;
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01-JUC-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UFDATE)
BETA CHEMOKINE EXODUS-2.
SCYA21.
MUS MUSCULUS (MOUSE).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                       ö
                                                                                                                                                                                                                                                                                                      RATTUS NORVEGICUS (RAT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97444139.

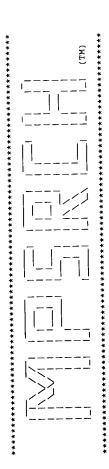
HROMAS R., KIM C.H., KLENGZ M., KRATHWOHL M., FIFE K., COOPER S., HROMAS R., KIM C.H., KLENGZ M., KRATHWOHL M., FIFE K., COOPER S., SCHNIZLEIN-BICK C., BROXMEYER H.E.; SIGNIZLEIN-BICK C., BROXMEYER H.E.; SIGNIZLEIN-BICK C., CHEMOKINE WITH a unique 37-amino acid carboxyl-terminal extension."; J. IMMUNOL. 159:2554-2558(1997).
                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LESSLAUER W.;

"A novel rat Cc chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
ERML, 090447; (31899246; -...
ERML, AF053312; G3551817; -...
PFAM, PF00048; 118; 1.
                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-FISHER 344; TISSUE-BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 65; DB 11; Length 96; Pred. No. 7.66e-02; 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                             STRAIN-SPRAGUE-DAWLEY;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                       2; Indels
                                                        Score 65; DB 4; Length 95;
Pred. No. 7.66e-02;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                               01-WAY-1997 (TREMBLREL. 03, CREATED)
01-WAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96 AA; 10875 MW; 3FC09DD8 CRC32;
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
SEQUENCE 95 AA; 10691 MW; 1526B4C0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
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                                                           Ouery Match 68.4%;
Best Local Similarity 60.0%;
Matches 6; Conservative
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TISSUE=TOTAL FETUS;
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2 ICADPTQKWV 11
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2 ICADPTQKWV 11
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Pred. No. 7.66e-02;
3; Mismatches 2; Indels
                          SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U88322; G3169697; --
MGD; MGI:1097677; SCYA21.
MGPAR; PF00048; 118: 1.
SEQUENCE 133 Aa; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                                                                                                                                                                                  Search completed: Fri Feb \,4\,\,17:46:47\,\,2000 Job time : 69 secs.
                                                                                                                                                 y Match
Local Similarity 58.3%;
hes 7; Conservative
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| EICADPTQKWVQ 12
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TISSUE=TOTAL FETUS;
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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:51:34 2000; MasPar time 5.03 Seconds 130.146 Million cell updates/sec Tabular output not generated.

>US-09-150-813-67 (1-12) from US09150813.pep Description: Perfect Score: Title:

1 EICADPKERWVR 12 Sequence:

179066 seqs, 54579741 residues PAM 150 Gap 15 Scoring table:

Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremp19 Database:

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 1:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 26.277; Variance 37.848; scale 0.694 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	2.23e-03	3.58e-03	3.58e-03	3.58e-03	3.58e-03	5.72e-03	9.11e-03	0 110-03	00 011.0	1.45e-02	1.45e - 02	1.45e - 02	3.62e-02	1.40e-01	2 280-01	1000	3.38e-UI	8.04e-01	8.04e-01	0.010-01	0.046.0	1.23e+00	1.236+00
	Description	CC CHEMOKINE-1.	CC CHEMOKINE ABCD-1.	NEUROTACTIN.	FRACTALKINE.	CX3C CHEMOKINE PRECURS	OF CHEMOKINE ST38 PREC	THU CENTRE DEPLACE OF THE	- SHOOM SELECTION SELECTIO	BETA CHEMOKINE EACHUS	RANTES PRECURSOR.	ORF K6.	CC CHEMOKINE EXODUS.	CHEMOKINE EXODUS.	TOTA ATONA BENA DRECIIR	UD/U ALEIM PEIM : MESSI	MP1F-2.	IL-10-INDUCIBLE CHEMOK	LFCA-1 PROTEIN PRECURS	MEN DEPOTETN DRECTIRSOR	NOO FINCTION TO THE PARTY OF TH	CHITIN SYNTHETASE 1.	SMALL INDUCIBLE CYTOKI	BETA CHEMOKINE EXODUS-
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SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                 CYPRINGS CARPIO (COMMON CARP).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;

TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;

CYPRINIDAE; CYPRININAE; CYPRINUS.
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MEDLINE; 98353531.
SCHANIEL C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C.,
                                                                                                                                          SEQUENCE FROM N.A. FUJIKI K., NAKAO M., SHIN D., YANO T.; "CDNA cloning of a carp CC chemokine homologous to mammalian
                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 66.7%; Pred. No. 2.23e-03;
Matches 8; Conservative 3; Mismatches 1; Indels
                                                                                                                                                                                                   SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AB010469; D1032417; SEQUENCE 101 AA; 11266 MW; 9CFBD540 CRC32;
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01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE) 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE) CC CHEMOKINE-1.
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| EICADPKERWVR 12
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                         Gaps
                          "Activated murine B lymphocytes and dendritic cells produce a novel CC chemokine which acts selectively on activated T cells.";
J. EXP. MED. 188:451-463(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAN Y, CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J., GONZELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J., GUTIERREZ-RAMOS J.C., GEARING D.; "Neurotactin, a membrane-anchored chemokine upregulated in brain inflammation."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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SHIMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G., SIDERAS P.,
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ROSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
LLOTHIK A., BAZAN J.F.;
SUBMITTED (MAR-19N J) F.;
SUBMITTED (MAR-1987) F.
EMBL, U92565; G2459677; -
PFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
                                                                                                                   Score 75; DB 11; Length 92;
Pred. No. 3.58e-03;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 395;
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Pred. No. 3.58e-03;
3; Mismatches 0; Indels
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LAST ANNOTATION UPDATE)
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01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NATURE 387 611-617(1997).
EMBL, AF010586; G237698; -.
PFAM, PF00048; 118; 1.
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
                                                                                    92 AA; 10302 MW; BC7219A0 CRC32;
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                                                                                                                Query Match
Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                      EMBL; AF052505; G3378116;
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les 8; Conservative
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2 ICADPKERWVR 12
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                                                                                                                                                                                                                                                                                                                                      NEUROTACTIN.
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035188
035188;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M.,
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"Homo sapiens Chromosome 16 BAC clone CIT98'SK-A-152E5.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                               BAZAN J.F., BACON K.B., HARDIMAN G., WANG W., SOO K., ROSSI D., GREAVES D.R., ZLOTNIK A., SCHALL T.J.;
"A new class of membrane-bound chemokine with a CX3C motif.";
NATURE 385:640-644(1997).
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       Indels
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Pred. No. 3.58e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                            01-MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF053313; G3551819; -.
EMBL; AJ007862; E1312757; -.
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01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
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C8093D7D CRC32;
      Mismatches
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    397
    AA;
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    MW;

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EMBL; U84487; G188523; -.
EMBL; ACO04382; G3252821; -.
PFAM; PF00048; 118; 1.
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Similarity 72.7%;
8; Conservative
 8; Conservative
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                                                                                                                       PRELIMINARY;
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                              73 FCADPKEKWVQ 83
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2 ICADPKERWVR 12
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P78423 PREI
P78423; O00672;
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SEQUENCE FROM N.A.
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Q98158
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0
                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                        SEGUENCE FROM N.A.
ADAMS M.D., IOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M.
ADAMS M.D., IOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M.
"HARMNON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"HOMO SAPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                  Ω.
                                                                                                                                                                                                                                                                                                                CHANG M.S., MCNINCH J., ELIAS III C., MANTHEY C.L., GROSSHANS MENG T., BOONE T., ANDREW D.P.; SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                     ;
0
                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
GODISKA R., CHANTRY D., RAPORT C.J., SOZZANI S., ALLAVENA P.
MANTOVANI A., GRAY P.W.;
J. EXP. MED. 185:0-0(0).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACROPHAGE-DERIVED CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HROWAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.; SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 93;
                                                 Length 97;
                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                              04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 73; DB 4; L6
Pred. No. 9.11e-03;
2; Mismatches 2;
                                                   Score 74; DB 11; I
Pred. No. 5.72e-03;
                       CC CHEMOKINE ST38.
053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65EA63D2 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT; 134 AA.
                                                                       3; Mismatches
                                                                                                                                                  93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         POTENTIAL.
                                                                                                                                                                                        01-NOV-1998 (TREMBLREL. 08, LAST ANNOTA MACROPHAGE-DERIVED CHEMOKINE PRECURSOR.
               POTENTIAL.
                                                                                                                                                                      04, CREATED)
                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25 93
93 AA; 10580 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATARRHINI; HOMINIDAE; HOMO
                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; U83171; G1931581; -.
EMBL; U83239; G2062425; -.
EMBL; AC004382; G3252820; -.
PFAM; PF00048; il8; 1.
               1 27
28 97
97 AA; 10826 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 66.7%;
Matches 8; Conservative
                                                     74.0%;
                                                      Query Match 74.0%;
Best Local Similarity 63.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                       7; Conservative
                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                      01-JUL-1997 (TREMBLREL. 01-JUL-1997 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74 EICADPRVPWVK 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                            74 VCADPKQNWVK 84
                                                                                                        :|||||: ||:
2 ICADPKERWVR 12
                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                              MDC OR A-152E5.1
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                                   SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL.
                                                                                                                                                                000626;
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                  SIGNAL
        SIGNAL.
                           CHAIN
                                                                          Matches
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CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                        SEQUENCE FROM N.A.

NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S.,
NISHIMURA M., KARIZAKI M., NOMIYAMA H., YOSHIE O.;
SUBMITTED (3UG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; 088320; 62196920; -.
EMBL; AF001979; G2624925; -.
EMBL; AF001979; 1022673; -.
FPAM; PF00048; 118; 1.
SEQUENCE 134 AA; 14646 MW; FE86A239 CRG32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
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MEDLINE; 97400322.
HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 72; DB 4; Length 91;
Pred. No. 1.45e-02;
4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                      / Match
Local Similarity 75.0%; Pred. No. 9.11e-03:
                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 9.11e-03;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genes.";
SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                       HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06, CREATED)
06, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CF404FAD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AF043341; G2905632; -...
EMBL; AF088219; G3719366; -...
PROSITE; PS00472; SMALL_CXTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                098158; 012569;
01-FEB-1997 (TREMBLREL. 02, CREATED)
                                                        containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RANTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 23
24 91
91 AA; 9990 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-1998 (TREMBLREL.
01-JUN-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71 QVCANPEKKWVR 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 ELCADPKELWVO 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
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                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                             RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.,
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                    MORE P.S., BASHOFF C., WEISS R.A., CHANG Y.; "Molecular minicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 72; DB 14; Length 95;
Pred. No. 1.45e-02;
1; Mismatches 3; Indels
                                           KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
GAMMAHERPESVIRINAE; RHADINOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUR R., LINS.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL: U75698; G1718266; -
EMBL: U75698; G1658273; -
EMBL: U71366; G2246546; -
EMBL: U71366; G3551763; -
PFAM; PF00048; i18; 1
HYPOTHETICAL PROTEIN.
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                   PROC. NATL. ACAD. SCI. U.S.A. 93:14862-14867(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10485 MW; 5283348D CRC32;
                                                                                                                                                                             SCIENCE 274:1739-1744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . VIÑOL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Match
Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74 QICADPSKNWVR 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           :||||||
1 EICADPKERWVR 12
                                                                                                                                                                                               [2]
SEQUENCE FROM N.A.
                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                          97094384
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                                                                                                                                                                     KSHV."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pathogenicity?"
                                                                                                                                                                     genes by
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P97884
P97884;
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LAST SEQUENCE UPDATE) LAST ANNOTATION UPDATE)

01 MAY-1997 (TREMBLREL. 03, C)
01-MAY-1997 (TREMBLREL. 03, L)
01-NOY-1998 (TREMBLREL. 08, L)
CC CHEMOKINE EXODUS.
RATTUS NORVEGICUS (RAI).

CREATED) PRT;

96 AA.

PRELIMINARY;

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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-ON-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
LO78 ALPHA BETA PRECURSOR (FRAGMENT).
HOMO SAPIENS (HUMAN).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=PANCREAS;
MEDLINE: 97275143.
MEDLINE: 97275143.
MEDLINE: 97275143.
MEDLINE: 97275143.
MEROMAS R., GRAY P.W., CHANTRY D., GODISKA R., KRATHWOHL M., FIFE K. BELL G.I., TAKEDA J., ARONICA S., GORDON M., COOPER S., "CLOning and characterization of exodus, a novel beta-chemokine.";
MEDLOD 89:3315-3322(1997).
MEDLOD 89:3315-332(1997).
MEDLOD 89:3318.
MEDLOD 89:3315-332(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                LESSLAUDE W.;
"A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
J. NEUROLMMOLL. 00.0-0(1998).
EMBL; U90447; G1899246;
EMBL; AF053312; G3551817;
PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
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                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN=FISHER 344; TISSUE=BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
                                                                                                                     KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 70; DB 4; Length 95;
Pred. No. 3.62e-02;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 72; DB 11; I
Pred. No. 1.45e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 AA; 10875 MW; 3FC09DD8 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10691 MW; 1526B4C0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95 AA.
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                       SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 72.0%;
Best Local Similarity 63.6%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATARRHINI; HOMINIDAE; HOMO
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Local Similarity 54.5%;
es 6; Conservative
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EUKARYOTA; METAZOA; C
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2 ICADPKERWVR 12
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                                                                         SEQUENCE FROM N.A.
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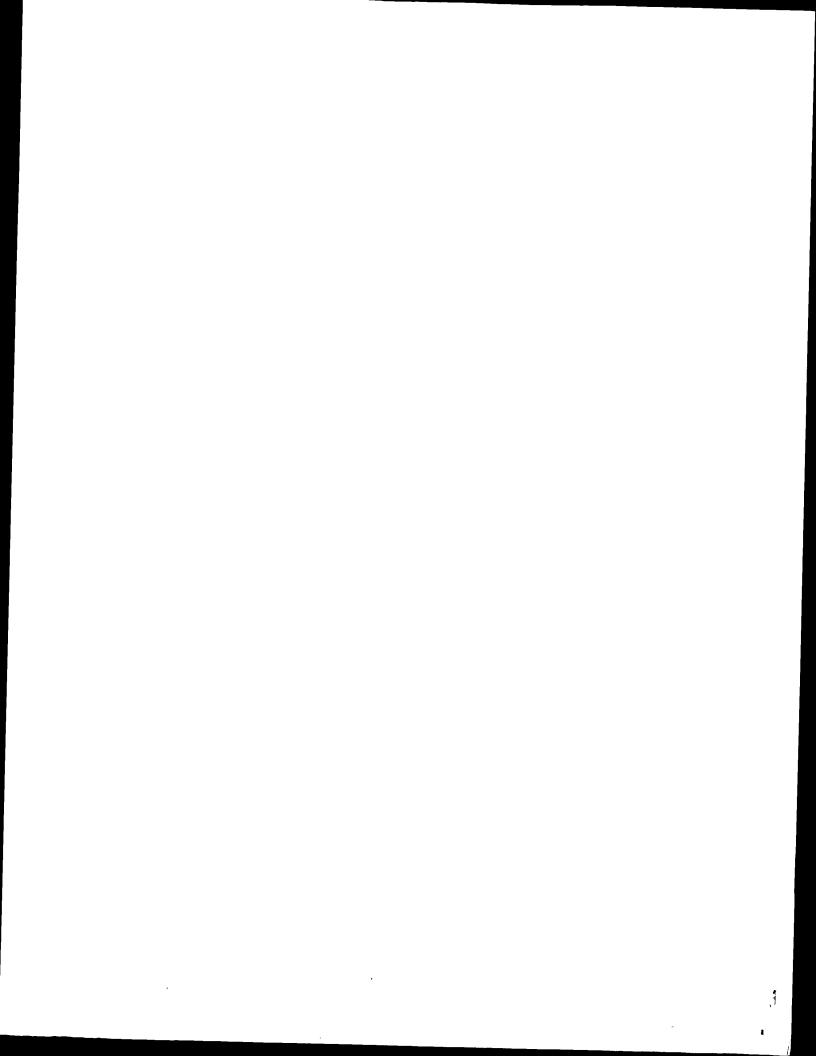
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CATARRHINI; HOMINIDAE; HOMO.
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EMBL, U85768; G191625; -.

PERM, PRO0048; 118; 1.

SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;
                     ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K., RISHIZUKA K., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R., MIYAKAWA T.; SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; D63785; D1016501; -. PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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                                                                                                                                                                                                      Score 67; DB 4; Length 80;
Pred. No. 1.40e-01;
3; Mismatches 2; Indels
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SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-37N-1998 (TREMBLREL. 05, CREATED)
01-37N-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-07N-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                          01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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                                                                                                                                             POTENTIAL.
LD78 ALPHA BETA.
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80 AA; 8857 MW;
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Local Similarity 58.3%;
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TISSUE-LIVER;
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YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
HANGOC G., KWON B.S.;
SHOUDAL K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T.,
                                                                          "Structure of a region of 181 kb containing five CC chemokine genes.";
                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 65.0%; Score 65; DB 4; Length 120; Best Local Similarity 41.7%; Pred. No. 3.38e-01; Matches 5; Conservative 6; Mismatches 1; Indels
                                                                                                                       SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                              BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
EMBL: U9146; G2581781; -.
EMBL: AB007454; D1024963; -.
EMBL: AR08219; G37193455; -.
EMBL: AF055467; G3395776; -.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE 120 AA; 13600 MW; A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: Fri Feb 4 17:52:30 2000
                       YOSHIE O., NOMIYAMA H.;
BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:51:10 2000; MasPar time 2.53 Seconds 134.236 Million cell updates/sec MPsrch_pp

Tabular output not generated.

Run on:

>US-09-150-813-67 (1-12) from US09150813.pep 100 Description: Perfect Score:

1 EICADPKERWVR 12 Sequence:

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

1:swissprot swiss-prot37 Database:

Mean 26.354; Variance 35.730; scale 0.738 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	3.46e-09	2.70e-07	1.34e-06	6.50e-06	6.50e-06	1.10e-05	3.08e-05	5.16e-05	5.16e-05	8.60e-05	8.60e-05	1.43e - 04	1.43e - 04	1.43e-04	1 430-04	1 430-04	10.00.0	2.3/e-04	3.91e-04	6.45e - 04	6.45e-04	6.45e-04	450-04	1000-030	T.00e-03
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                -!- INDUCTION: BY INTERFERON GAMMA, MITOGENS AND INTERLEUKIN-1.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JIA G. O., GONZALO J.A., LLOYD C., KREMER L., LU L., MARTINEZ A.C., WESEHIL B.K., GTIEBREZ-RAMOS J.C., "Distinct expression and function of the novel mouse chemotactic protein-5 in lung allergic inflammation."; J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOY-1997 (REL. 35, CREATED)
01-NOY-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP-5) (MCP-1 RELATED
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EUKARYOTA: METAZOA: CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                       MONOCYTE CHEMOTACTIC PROTEIN 2. PPRROLIDONE CARBOXYLIC ACID. BY SIMILARITY. BY SIMILARITY.
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91.7%;
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EMBL; Y16645; E1253690; -.
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HSSP; P13500; 1DOL.
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MCP5_MOUSE
Q62401;
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 SUBUNIT
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                                                                                                                                                                             J. EXP. MED. 185:99-109(1997).
-1- FUNCTION: CHEWOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GARCIA.ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N.,
LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;
"Human monocyte chemoattractant protein (MCP)-4 is a novel CC
chemokine with activities on monocytes, eosinophils, and basophils
induced in allergic and nonallergic inflammation that signals through
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                          "Murine monocyte chemoattractant protein (MCP)-5; a novel CC chemokine that is a structural and functional homologue of human
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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                                     MEDLINE; 97149438.
SARAFI M., GARCIA-ZEPEDA E.A., MACLEAN J.A., CHARO I.F.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
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08FA6C35 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104 AA; 11659 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U50712; G1477582; -. EMBL; U66670; G1881583; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              larity 83.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGD; MGI:108224; SCYA12.
PROSITE; PS00472; SMALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL PFAM; PF00048; i18; 1. HSSP; P13500; 1DOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match
Best Local Similarity (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72 EICADPKEKWVK 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 EICADPKERWVR 12
[2]
SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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MCP4_HUMAN
Q99616;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UGUCCIONI M., LOETSCHER P., FORSSMANN U., DEWALD B., LI H., LIMA S.H., LI Y., KREIDER B., GAROTTA G., THELEN M., BAGGIOLINI M.; Monocyte chemotactic protein 4 (MCP-4), a novel structural and functional analogue of MCP-3 and eotaxin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MASS SPECTROMETRY: MW=9314; MW_ERR=30; METHOD=MALDI; RANGE=17-98.
MASS SPECTROMETRY: MW=8760; MW_ERR=30; METHOD=MALDI; RANGE=22-98.
MASS SPECTROMETRY: MW=8575; MW_ERR=30; METHOD=MALDI; RANGE=24-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PFAM: PF00048; i18; 1.
HSSP: P13500; 1DOL.
CYTOKINE; CHEMOTAXIS; SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                       BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., BERKHOUT T.A., SARRU H.M., MOORES K., WAKWARA J., FOLEY J.J., APPERBAUME B., REAPE T.J., BRAWNER M., MATTHEWS J., O'DONNELL K., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHER C.; "Cloning, in vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine receptor 2B.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MONOCYTE CHEMOTACTIC PROTEIN 4.
                                                                                                                                                                                                                                                                                                                                                      DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
the CC chemokine receptors (CCR)-2 and -3."; J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                             SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
                                       SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
                                                                                                                                                                                                                                                                                                                BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U46767; G1732123; -.
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98
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                                                          TISSUE-FETAL;
MEDLINE; 96235049.
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01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROFEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC
AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         LURUTANI Y., NOWURA H., NOTAKE M., OYANADA Y., FUKUI T., YAMADA M., LARSEN C.G., OPPENHEIM J.J., MATSUSHIMA K.; "Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAEP)."; BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989).
                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The expression of monocyte chemotactic protein (MCP-1) in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.; "Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family."; INT. IMMUNOL. 1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROLLINS B.J., STIER P., ERNST T., WONG G.G.; "The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 94150478.
LI Y.S., SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F.,
KOLATTUKUDY P.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SHYY Y.J., LI Y.S., KOLATTUKUDY P.B.; "Structure of human monocyte chemotactic protein gene and its regulation by TPA.";
                                                                                                                                                                                                                                                                                                                                                                                     EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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LEONARD E.J.;
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                0; Indels
                                                                                   DB 1; Length 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEM. BIOPHYS. RES. COMMUN. 169:346-351(1990).
                                                                                                   No. 1.34e-06;
                                             POTENTIAL.
DF52F6EC CRC32;
                                                                                                                                                                                                                                99 AA.
                                                                                                                  2; Mismatches
                BY SIMILARITY.
BY SIMILARITY.
                                                                                     Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOL. CELL. BIOL. 9:4687-4695(1989).
       24
58
74
29
10986 MW;
                                                                                      Query Match
Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
                                                                                                                                                  72 EICADPKEKWVQ 83
                                                                                                                                                                             1 EICADPKERWVR 12
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34
35
29
8 AA;
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P13500;
         MOD_RES
DISULFID
DISULFID
                                                CARBOHYD
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KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
"Structural characterization of a monomeric chemokine: monocyte
chemoattractant protein-3";
FEBS LETT. 395-277-282(1996).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR EOSINOPHILS. AGGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.;
"Deletion of the NH2-terminal residue converts monocyte chemotactic protein 1 from an activator of basophil mediator release to an ecsinophil chemoatrractant.";
"EXP. MED. 183:681-685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;

"Structure/activity analysis of human monocyte chemoattractant protein-1 (MCP-1) by mutagenesis. Identification of a mutated protein that inhibits MCP-1-mediated monocyte chemotaxis.";

J. BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LUBROWSKI J., BUJAC2 G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.; "The structure of MCP-1 in two crystal forms provides a rare example of variable quaternary interactions."; NAT. STRUCT. BIOL. 4:64-69(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 96234959.

HANDEL T.M., DOMAILLE P.J.;

"Heteronuclear (1H, 13C, 15N) NMR assignments and solution structure of the monocyte chemoattractant protein-1 (MCP-1) dimer.";

BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                                                            ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA S., GRIFFIN P.R.,
                                                                                                                                                                                                                                                                                                                                  DECOCK B., CONINGS R., LENAERTS J.-P., BILIAU A., VAN DAMME J.; "Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally
                                                                                                                                                                                                          SHABANOWITZ J., HUNT D.F., APPELLA E., "Complete amino acid sequence of a human monocyte chemoattractant, putative mediator of cellular immune reactions."; PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GRONDENBORN A.M., CLORE G.M.;
"Modeling the three-dimensional structure of the monocyte chemo-attractant and activating protein MCAF/MCP-1 on the basis of the solution structure of interleukin-8.";
PROTEIN ENG. 4:263-269(1991).
                                                                                                        an monocyte chemoattractant protein-1 (MCP-1).";
EXP. MED. BIOL. 305:47-56(1991).
                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. BIOPHYS. RES. COMMUN. 167:904-909(1990).
vascular endothelium in vitro and in vivo.";
MOL. CELL. BIOCHEM. 126:61-68(1993).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
                                                                                                                                                                                                                                                                                                    SEQUENCE OF 29-53 AND 82-92.
                                                                                       YOSHIMURA T., LEONARD E.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                          -STRUCTURE MODELLING.
                                                                          92095166
                                                                                                                                                                             89184525
                                                                                                                                                                                                                                                                                                                      90211336
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                                                    SECUENCE FROM
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                                  -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
-!- PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL, SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
 ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MISSING: 90% REDUCTION IN ACTIVITY MISSING: 83% REDUCTION IN ACTIVITY. D->A: 90% REDUCTION IN ACTIVITY. R->F: 95% REDUCTION IN ACTIVITY. S->Q: 40% REDUCTION IN ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y->D: LOSS OF ACTIVITY.
R->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 84; DB 1; Length 99;
Pred. No. 6.50e-06;
3; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
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S->Q:
Y->D:
                                                                                                                                                                                                                                       M30816; G386961; JOINED. M31625; G386961; JOINED.
                                                                                                                                                                                                                                                                                                                          G338007; JOINED.
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                                                                                                    C-C) (CHEMOKINE CC).
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                                                                                                                                                                                                                                                                 G307163;
                                                                                                                                                                                                                                                                         M28226; G338009;
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1DOL; 12-MAR-97.
1DOM; 14-OCT-96.
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                                                                                                                                                                                                                                                                                          G34514;
                           ATHEROSCLEROSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1DON; 14-OCT-96.
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S03339; S03339.
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                                                                                                                                                                                                                                                                                                                M28225:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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MUTAGEN
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EMBL;
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EMBL;
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EMBL;
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                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
q
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101 AA.

STANDARD;

RESULT 5 TD MCP1_CANFA

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[1]
SEQUENCE FROM N.A.
                                                                                                            rissue=brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP2_BOVIN
Q09141;
                                                                                                                       O.R.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                   MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                         -!- SUBGNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- INDUCTION: BY TNF-ALPHA.
-!- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR
                                                                                                                                                                      KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A., LINDSEX M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J., ROSSEN R.D., SMITH C.W., ENYMAN M.L., "Induction of monocyte chemoatractant protein-1 in the small veins of the ischemic and reperfused canine myocardium."; cIRCULATION 95:693-700(1997).
                                                                                                                                                                                                                                                                                                                                          VEINS, AND INFILTRATING LEUKOCYTES.

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                            FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE CUUSED OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA; METAŽOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                      CANIS FAMILIARIS (DOG).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 84; DB 1; Length 101;
Pred. No. 6.50e-06;
3; Mismatches 0; Indels
              01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A7075B14 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U29653; G1144186; -.
PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; IDON.
                                                                                                                                                  TISSUE-JUGULAR VEIN ENDOTHELIAL;
MEDLINE; 97176620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 AA; 11121 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                  CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 EICADPKOKWVO 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUS SCROFA (PIG)
                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34
35
                                                                                                                                                                                                                                                        - i - FUNCTION:
                                                                                SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LT 6
MCP1_PIG
P42831;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
         P52203;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCSCEPTER
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- PUNCTION: CHEMOTACTIC PACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -i- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                  -:- SUBUNIT: MONOMER OR HOMODIMER: IN EQUILIBRIUM (BY SIMILARITY).
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
   HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.; "Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): analysis by polymerase chain reaction and cDNA cloning."; BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS.
                                                                                                                                                                                                                                           SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1995 (REL. 32, CREATED)
1-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 83; DB 1; Lored. No. 1.10e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ECC3AFB4 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99 AA; 10976 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; Z48479; G683717; -
EMBL; X79416; G872313; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||||:||:||:
| EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 EICAEPKOKWVO 84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 94114084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINE; 94183284.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SERAIN=C57BL/6J; TISSUE-LUNG; STRAIN=C57BL/6J; TISSUE-LUNG; MEDLLINE; 96158746. GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., KOPF M.,
                                                                                                                                                                                                                        SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IMMUNITY 4:1-14(1996).

-! FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEATURE OF ALLERGE INFLAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACKOPHAGES OR NEUTROPHILS.

-! SUBCELLUIAR LOCATION: EXTRACELUIAR.
-! TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHELIAL CELLS), INTESTINE, HEARY, SPLEEN, KIDNEY.
-! INDUCTION: BY INTERPERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-! SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROTHENBERG M.E., LUSTER A.D., LEDER P.,
"Murine eotaxin: an eosinophil chemoattractant inducible in
endothelial cells and in interleukin 4-induced tumor suppression.";
PROC. NATL. ACAD. SCI. U.S.A. 92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Mouse ectaxin expression parallels eosinophil accumulation during
lung allergic inflammation but it is not restricted to a Th2-type
                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                          BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 3.08e-05;
                                                                                                                                                                                                                                                                                                                                            9BA2CD26 CRC32;
                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                          5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97 AA
                                                                                                                                                                         SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                           SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                         Score 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1996 (REL. 33, CREATED)
                                                                                                                                                                                                                                                                                                                                         10900 MW;
                                                                                                                                                                                                                                                                                                                                                                         81.0%;
                                                                                                                                                                                                                                                                                                                                                                                        larity 58.3%;
Conservative
                                                                                                                                    EMBL; S67954; E118856; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                   PFAM; PF00048; i18; 1.
HSSP; P80098; INCV.
                                                                                                                                                                                                                     CYTOKINE; CHEMOTAXIS;
                                                                                                                                                         ; G544997
                                                                                                                                                                                                                                                                                                                                                                                                                                      73 DVCADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                     99 AA;
                                                                                                                                                                     PROSITE; PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96004658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EOTA_MOUSE
P48298;
                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                      MOD_RES
                                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Burpean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                               Db 1,
5.16e-05;
...ac 1; Indels
                                                                                                                                                                                      EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WILLIAMS C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C., FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBMITTED (DEC-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                              ECTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                     2; Mismatches
                                                                                                                                                    SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; Y08358; E274141; -.

EMBL; U96637; G2098785; -.

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

PFNA; PF00048; 118; 1.

HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                           Score 80;
                                                                                                                                                                                                                                                                                                           No.
                                                                                                                                                                                                                                                                                                        Pred.
                                                                                                                                                                                                                                                                  97 AA; 10893 MW;
                                                                                                                                                                                                                                                                                                       larity 75.0%;
Conservative
                                                                                                             EMBL; U26426; G995911; -. EMBL; U40672; G1113937; -.
                                                                                                                                                                                                                                                                                           80.08;
                                                                                                                                   MGD; MGI:103576; SCYA11,
PROSITE; PS00472; SMALL.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                         71 EICADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                           EUKARYOTA; METAZOA;
                                                                                                                                                                            P80098; 1NCV
                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-LUNG;
                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WILLIAMS
                                                                                                                                                                                                                SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
δλ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Human eotaxin is a specific chemoattractant for eosinophil cells and provides a new mechanism to explain tissue eosinophilia.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BARTELS J., SCHLUETER C., RICHTER E., NOSO N., KULKE R., BARTELS J., SCHROEDER J.M.;
"Human dermal fibroblasts express ectaxin: molecular cloning, mRNA expression, and identification of ectaxin sequence variants.";
BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Cloning of the human eosinophil chemoattractant, eotaxin. Expression, receptor binding, and functional properties suggest a mechanism for the selective recruitment of eosinophils."; J. CLIN. INVEST. 97:604-612(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-PLACENTA;
MEDILIA: 97312708.
GARCIA-ZEPEDA E.A., ROTHENBERG M.E., WEREMOWICZ S., SARAFI M.N.,
MORTON C.C., LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

TISSUE-SMALL INTESTINE;

MEDLINE; 96205964.

KITADRA M., NARAJIMA T., IMAI T., HARADA S., COMBADIERE C.,

KITADRA M., NARAJIMA T., YOSHIE O.;

TIFFANY H.L., MURPHY P.M., YOSHIE O.;

"Molecular cloning of human ectaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil ectaxin receptor, CC chemokine receptor 3.";

J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
EUKRRYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GARCIA-ZEPEDA E.A., ROTHENBERG M.E., OWNBEY T.R., LEDER P.,
                                                                                                                                            Score 80; LL., Pred. No. 5.16e-05; Pred. No. 5.16e-15; Indels
                                                                                                                                         Score 80; DB 1; Length 97;
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                   05B4ED45 CRC32;
                                            EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
                                POTENTIAL.
                                                                                     POTENTIAL.
                                                                                                                10851 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAT. MED. 2:449-456(1996).
                                                                                                                                                          75.08;
                                                                                                                                                                          Conservative
                                   23
97
57
73
                      INFLAMMATORY RESPONSE
                                                                                                                                                                                                   71 EICADPKKKWVQ 82
                                                                                                                                                                                                                             1 EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 96189937.
                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 96181758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MACKAY C.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LUSTER A.D.
                                                             DISULFID
                                                                                                                    SEQUENCE
                                                                                           CARBOHYD
                                                                                                                                               Query Match
                                                                                                        CONFLICT
                                                                                                                                                                 Best Loca
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                   Gaps
"Genomic organization, complete sequence, and chromosomal location of the gene for human eotaxin (SCYA11), an eosinophil-specific CC
                                                                                                               Genomic organization, sequence, and transcriptional regulation of
                                                                                          , SCHLUETER C., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE; POLYMORPHISM; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L -> P (IN CLONE 34).
A -> T (IN CLONE 53).
R -> S (IN CLONE 34).
K -> R (IN CLONE 53).
; 6COF3D98 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 79; DB 1; L. Pred. No. 8.60e-05;
                                                                                                                              the human ectaxin gene.";
BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 8.60e-C
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EOTAXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10732 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U46573; G1280141; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U34780; G1185440; -
EMBL; D49372; G1552241; -
EMBL; Z69291; E221070; -
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EMBL; 275669; E251258; -...
EMBL; U46572; G2088509; -...
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; Z92709; E329504; -.
                                 chemokine.";
GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71 DICADPKKKWVO 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PFAM; PF00048; il8; 1
PDB; 2EOT; 11-NOV-98.
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51
79
97 AA;
                                                                 SEQUENCE FROM N.A.
                                                                                     MEDLINE; 97445071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MCPA_BOVIN
P28291;
                                                                             TISSUE-LUNG
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VARIANT
VARIANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTORINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                    WEMPE F., EINSPANIER R., SCHEIT K.H.;
"Characterization by cDNA cloning of the mRNA of a new growth factor from bovine seminal plasma: acidic seminal fluid protein.";
BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
                                                                                                                                                               WEMPE F., HENSCHEN A., SCHEIT K.H.;
Gene expression and cDNA cloning identified a major basic protein
constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).";
DNA CELL BIOL. 10:671-679(1991).
                                                                              EUTRRYODA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS
                                                                                                                                                                                                                                                                                                                                                                                 WEMPE F., KUHLMANN J.K., SCHEIT K.H.; "Characterization of the bovine monocyte chemoattractant protein-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          BIOCHEM, BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
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MONOCYTE CHEMOTACTIC PROTEIN 1A.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 8.60e-05;
4; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C8F5821D CRC32;
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BY SIMILARITY.
BY SIMILARITY.
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BR; JC2336; JC2236.
PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11114 MW;
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Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; L32659; G624394; -. EMBL; M84602; G163395; -.
                                                       SEMINAL FLUID PROTEIN).
                                                                                                                                        TISSUE=SEMINAL PLASMA;
MEDLINE; 92096117.
                                                                                                                                                                                                                                                               TISSUE=SEMINAL PLASMA;
                                                                    BOS TAURUS (BOVINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 ELCADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EICADPKERWVR 12
                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                            MEDLINE; 92181448
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35
99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        NEUTROPHILS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MI1A_RAT
P50229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                     INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                         SHI M.W., GODLESKI J.J., PAULAUSKIS J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages.";
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEWOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-LONG EVANS; TISSUE-LUNG;
MEDLINE; 95238980;
SHANLER T.P., SCHMAL H., FRIEDL H.P., JONES M.L., WARD P.A.;
"Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats.";
                                       MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
                                                                RATTUS NORVEGICUS (RAT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 78; DB 1; Length 92;
Pred. No. 1.43e-04;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY
BY SIMILARITY
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PFAM; PF00048; 118, 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                          IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 23
24 92 B
34 57
35 73 B
6 6 A
57 57
92 AA; 10335 MW; C
                                                                                                                                     ; TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U22414; G790633; -. EMBL; U06435; G459150; -.
                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 24-57.
                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                  STRAIN=CD-1; TISS
MEDLINE; 95298037
                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 96183056.
                                                     OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
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Gaps

.. 0

Conservative

Matches

71 QICADPKETWVQ 82

g

92 AA.

PRT;

STANDARD;

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CANIS FAMILIARIS (DOG).
                                                                                                                                                                                                                                                                                                                                                                STRAIN-BEAGLE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                            -i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                 "Cloning, sequencing, expression and inflammatory activity in skin of ovine interleukin-8."; ovine interleukin-8."; ovine interleukin-8."; ovine interleukin-8."; ovine interleukin-8."; ovine interleukin-8. T2:398-405(1994).

-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS, PAROPILIS, AND T-CELLS, BUD TO MONOCYTES. IT IS ALSO INVOLVED IN NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN RESPONSE TO AN INFLAMMATORY STIMULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                          OVIS ARIES (SHEEP).
EUKARYOTA: METAZOA: CHORDATA: VERTEBRATA; MAMMALIA; EUTHERIA:
ARTIODACTYLA; RUMINANTIA: PECORA; BOVOIDEA: BOVIDAE: CAPRINAE: OVIS.
                                                                                                                                                                                          LEGASTELOIS I., GREENLAND T., ARNAUD P., MORNEX J.F., CORDIER G.; "Sequencing of the ovine interleukin-8-encoding cDNA using the polymerase chain reaction."; GENE 150:367-369(1994).
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                                                                                                                                                                                                                                                                           SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;
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Pred. No. 1.43e-04;
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BY SIMILARITY.
BY SIMILARITY.
4; 5A574527 CRC32;
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01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8).
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                                                                                01-JUN-1994 (REL. 29, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8).
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PFAM: PF00048; 118; 1.
HSSP; P10145; 11KL.
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                                                                         01-JUN-1994 (REL. 29, CREATED)
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Best Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                           C-X-C) (CHEMOKINE CXC).
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                                                    STANDARD;
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IL8_CANFA
P41324;
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01-NOV-1995
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-i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAUDINGER N. S. STRAUBINGER A.F., HARTER L., JACOBSON R.H., STRAUBINGER R.K., STRAUBINGER B.A., BEBB H.N., APPEL M.J.; CHANG Y.-F., SUMMERS B.A., BEBB H.N., APPEL M.J.; CHANG Y.-F., SUMMERS B.A., BEBB H.N., APPEL M.J.; CHANG Y.-F., SUMMERS B.A., BEBB H.N., APPEL M.J.; CHANGIO Interleutin-8 in synovial membranes of dogs experimentally infected with ticks."; INFECT. IMMON. 65.1273-1285(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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MEDLINE; 95114148.
KUKIELKA G.L., SMITH W.C., LAROSA G.J., MANNING A.M.,
MENDOZA L.H., PALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,
MICHAEL L.H., ROT A., ENPWAN M.L.;
"Interleukin-8 gene induction in the myocardium after ischemia and
reperfusion in vivo.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                  MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T.,
GOITSUKA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA K.,
ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.;
"Molecular cloning and expression of canine interleukin 8 cDNA.";
                                                                                                                  SEQUENCE FROM N.A.
MEDLINE: 94010328.
SISTHIARMA J., SUZUKI S., HOTTA K., HIROTA Y., MIZUNO S., SUZUKI K.;
"Cloning of a canine gene homologous to the human
interleukin-8-encoding gene.";
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
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Pred. No. 1.43e-04;
3; Mismatches 1; Indels
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CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE;
SIGNAL

1 22 BY SIMILARITY.
SIGNAL
23 101 INTERLEUKIN-8.
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PFAM; PF00048; 118; 1.
HSSP; P10145; 11KL.
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Best Local Similarity 66.7%;
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EMBL; D14285; G475152; --
EMBL; U10308; G607814; --
EMBL; AF048717; G2935472;
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                                                                                                                          01-AUG-1991 (REL. 19, CREATED)
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVECLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  porcine alveelar macrophages,"

J. BIOL. CHEM. 266:8455-8463(1991).

-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
RESPONSE TO AN INTEAMMATORY STIMULUS.
-!- SUBUNIT: HOMODIMER.
-!- TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES.
-!- INDUCTION: BY LIPOPOLYSACCHARIDE.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE, 93041741.
GOODMAN R.B., FOSTER D.C., MATHEWES S.L., OSBORN S.G., KUIJPER J.L.,
FORSTROM J.W., MARTIN T.R.;
"Molecular cloning of porcine alveolar macrophage-derived neutrophil
chemotactic factors I and II; identification of porcine IL-8 and
another intercrine-alpha protein.";
BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI B.Y., MARTIN T.R.; "Identification of two neutrophil chemotactic peptides produced by
                                                                                                                                                                                                                         SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                        LIN G., PERRSON A.E., SCAMURRA R.W., ZHOU Y., BAARSCH M.J., WIRTSA D.J., MURTANGH M.P., "Regulation of interleukin." Regulation of interleukin. macrophages by bacterial lipopolysaccharide."; J. BIOL. CHEM. 269:77-85(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                         SANJANWALA M.;
SUBMITIED (JUL-1991) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBMITTED (MAR-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                     103 AA.
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EMBL; X61151; G516197; -
EMBL; M99367; G1235612; -
                   75 EVCLDPKEKWVQ 86
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IL8_PIG S'
P26894; P22951;
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                  PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
HSSP; P10145; 11KL.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                       INTERLEUKIN-8.
BY SIMILARITY.
BY SIMICARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
W; A012D59D CRC32;
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33 34 RC
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103 AA; 11633 MW;
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66.7%;
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PIR; A44253; A44253.
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:50:29 2000; MasPar time 3.74 Seconds 128.410 Million cell updates/sec Run on:

>US-09-150-813-67 (1-12) from US09150813.pep 100 1 EICADPKERWVR 12

Tabular output not generated.

Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

122810 seqs, 40068593 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

pir60 1:pir1 2:pir2 3:pir3 4:pir4 Database:

Mean 25.732; Variance 40.739; scale 0.632 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	1.72e-07	1.20e-04	1.20e-04	1.896-04	1.13e-03	1.13e-05	1.76e-03	1.70e-05	1./be-U3	1.76e-03	1.76e-03	1.76e-03	1.76e-03	7	•	00000		6.56e-03	1.01e-02	1.01e-02	2.38e-02	3.65e-02	5e-	5.56e-02	
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lymphotactin precurso monocyte adherence-in	macrophage inflammato	Lymphocactn Process	macropilaye intramato	macrophage Illitammaco	LD78-beta protein pre	immediate-early serum	immune activation gen	Neutrophil attractant	VOCCE of monor	Tymphocy te and monor	pre-B-cell growin-set	interleukin-8 homolog	monocyte chemoattract	monor or contract	cytokine mouse	cytokine SDF-1-Deta =	Chitin synthetase I -	Om - motora of o con-		titin, cardiac muscie	pev-induced protein -	AND THE CONTRACT OF THE PARTY O	translormacion indeed	Tympitocoxin
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ALIGNMENTS

JC5295 #type complete monocyte chemotactic protein-2 precursor - human #formal_name Homo sapiens #common_name man 02-May1997 *sequence_revision 18-Jul-1997 #text_change 17-Mar-1999	JC V2 V2 B3 H1 H1	cession JC5295 ##molecule_type mRNA ##molecule_type mRNA ##ersidues 1-99 ##label VAN ##cross-references GB::10802; NID::q1924937; PID::e294088; PID::g1924938 ##cross-references GB::10802; NID::q1924937; PID::e294088; PID::g1924938 ##experimental_source bone marrow ##experimental_source bone_source	mcp-2 **superfamily macrophage inflammatory protein #domain signal sequence #status predicted #label SIG\ #product monocyte chemotactic protein-2 #status predicted #label MAT #length 99 #molecular-weight 11246 #checksum 6596	tch 98.0%; Score 98; DB 2; Length 99; al Similarity 91.7%; Pred. No. 1.72e-07; 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0; EVCADPKERWVR 84 : EICADPKERWVR 12	JC4912 *type complete ectaxin precursor - human #formal_name Homo sapiens #common_name man name Homo sapiens #common_name man
RESULT 1 ENTRY TITLE ORGANISM DATE	ACCESSIONS REFERENCE #authors #journal #title #cross-ref	#accession ##molecule ##residues ##cross-re ##cxperime COMMENT This pro pro	GENETICS #gene CLASSIFICATION FEATURE 1-23 24-99 SUMMARY	Ma Loca les 73	RESULT 2 ENTRY TITLE ORGANISM

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Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroeder, J.M.
Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular cloning, mRNA expression, and identification of ectaxin sequence
                                                                                                                                                                                                                                                                         ##cross-references EMBL.275688, NID:91531982; PID:e251275; PID:91531983; PERSONNENT This protein has eosinophia specific chemotatic activity.

CLASSIFICATION #superfamily macrophane inflammatic activity.
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Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a monocyte secretory
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17.; Leonard, E.G.
17. 1989 J. 244:487-493
Human monocyte chemoattractant protein-1 (MCP-1). Full-length CDNR cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #authors Shyy, Y.J.; Li, Y.S.; Kolattukudy, p.E. Hjochem. Biochem. Biophys. Res. Commun. (1990) 169:346-351 #title Structure of human monocyte chemotactic protein gene and its regulation by TPA.
                                                                                                                                                                                                                                                                                                                                                                                                           #domain signal sequence #status predicted #label SIG\
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#length 97 #molecular-weight 10790 #checksum 448
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Pred. No. 1.20e-04;
2; Mismatches 1; Indels
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Conservative
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Int. J. Cancer (1990) 45:795-797
A chemoattractant expressed in human sarcoma cells
(tumor-derived chemotactic factor, TDCF) is identical to
monocyte chemoattractant protein-1/monocyte chemotactic and
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Blochem. Blophys. Res. Commun. (1990) 167:904-909
Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel
N-terminally processed form.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E.
#journal Mol. Cell. Blochem. (1993) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van
                                                                                                                                                                                         #authors Yoshimura, T.; Leonard, E.J.
#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#ccession 151841
                                                                                                                                                                                                                                                                                                          preliminary; translated from GB/EMBL/DDBJ
                                                  not compared with conceptual translation
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##residues
##cross-references GB:S71513; NID:9240867; PID:9240868
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##residues
##cross-references GB:M24545; NID:9187434; PID:9307163
                                                                                                                 ##cross-references GB:X14768; NID:934513; PID:934514
##experimental_source glioma cell line U-105MG
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#cross-references MUID:89153605
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#accession A32300
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#cross-references MUID:90211336
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**product monocyte chemoattractant protein 1, short form **status experimental *label MV2\'
**modified_site pyrrolidone carboxylic acid (Gln) (in mature form) **status experimental\'
**binding_site carbohydrate (Asn) (covalent) **status
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#formal name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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#product monocyte chemoattractant protein-1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
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Biochem. 1909-1962-968
Biochem. 1stal cells express monocyte chemoattractant
Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
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#product monocyte chemoattractant protein 1 #status
experimental #label MAT\
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                                                       Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F. Chinese J. Microbiol. Immunol. (1994) 14:29-32 The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1) gene.
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Best Local Similarity 75.0%; Pred. No. 1.20e-04;
Matches 9; Conservative 3; Mismatches 0; Indels
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflammatory protein
             ##cross-references GB:S69738; NID:g545464; PID:g545465
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #text_change
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#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
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predicted #label MATY
#binding_site carbohydrate (Asn) (covalent) #status
predicted
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                                                                                                                                                                                                                                                                                                                          Wempe, F.; Kuhlmann, J.K.; Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
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                                       Gaps
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##experimental source seminal vesicle
FICATION #superfamily macrophage inflammatory protein
US glycoprotein
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                                         0; Indels
Score 83; DB 2; Length 99; Pred. No. 1.89e-04;
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Pred. No. 1.13e-03;
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##residues 1-99 ##label WEM
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##residues 1-99 ##label WEM
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Best Local Similarity 66.7%;
Matches 8; Conservative
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    Query Match
Best Local Similarity 66.7%;
Matches 8; Conservative
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This protein is a polymorphonuclear leukocyles chemotactic factor
and is involved in the host defense function.
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                                                      Gaps
                                                                                                                                                                                                152322  #type complete
macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
02-Jul-1998
                                                                                                                                                                                                                                                                                                                         Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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19-May-1994 #sequence_revision 19-May-1994 #text_change
12-Apr-1995
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CLASSIFICATION #superfamily macrophage inflammatory protein
SUMMARY #length 92 #molecular-weight 10335 #checksum 3184
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#length 95 #molecular-weight 10611 #checksum 3157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               preliminary; translated from GB/EMBL/DDBJ
    Score 79; DB 2; Length 99;
Pred. No. 1.13e-03;
4; Mismatches 0; Indels
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Pred. No. 1.76e-03;
3; Mismatches 1; Indels
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2; Mismatches 1;
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##molecule_type mRNA
1-92 ##label RES
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  Query Match 79.0%;
Best Local Similarity 66.7%;
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Best Local Similarity 66.7%;
Matches 8; Conservative
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#authors Seow, H.F.; Yoshimura, T.; Wood, P.R.; Colditz, I.G. Immunol. Cell Biol. (1994) 72:398-405

Cloning, sequencing, expression and inflammatory activity in skin of ovine interleukin-8.
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#formal_name Sus scrofa domestica #common_name domestic pig
30 Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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Cordier, G.
submitted to the EMBL Data Library, March 1994
Nucleotide sequence of ovine interleukin 8 cDNA using
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                                    interleukin-8 sheep
#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
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06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
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#formal_name Ovis orientalis aries, Ovis ammon aries
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#length 101 #molecular-weight 11292 #checksum 294
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FICATION #superfamily beta-thromboglobulin
X #tength 101 #molecular-weight 11292 #checksum 294
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                                                                                                                                                                                                                                                                      preliminary; translated from GB/EMBL/DDBJ
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Pred. No. 1.76e-03;
3; Mismatches 1; Indels
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Pred. No. 1.76e-03;
3; Mismatches 1; Indels
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##cross_references GB:S74436; NID:9786590; PID:9786591
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#journal Biochemistry (1992) 31:10483-10490
#title Molecular cloning of porchine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porchine IL-8 and another intercrine-alpha protein.
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#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, M.J.; Welss, D.J.; Murtaugh, M.P.
M.J.; Welss, D.J.; Murtaugh, M.P.
J. Blol. Chem. (1994) 269;77-85
Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
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                                                                                                                                                                            ##experimental_source alveolar macrophage
##note sequence extracted from NCBI backbone (NCBIN:117415,
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FICATION #superfamily beta-thromboglobulin
release ##cross ##checksum 8835
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#length 103 #molecular-weight 11677 #checksum 8904
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Pred. No. 1.76e-03;
3; Mismatches 1
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3; Mismatches 1
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Pred. No. j
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##molecule_type mRNA; protein
##residues 1-103 ##label GOO
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#authors Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, P.; Entrara, P.; Caput, D. W.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. W.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. W.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. W.; Lupker, J.; Shire, D.; Perrara, P.; Caput, D.; Vita, M.; Caput, D.; Chemoattacton of MCP-3: a human monocyte-derived monocyte chemoattractant protein.
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The human MCP-3 apene (SCYR7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
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#title Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and comparison with other chemokines. #cross-references MID:93213290
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#product monocyte chemotactic protein 3 #status
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#length 109 #molecular-weight 12356 #checksum 1535
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##cross-references EMBL:X71087; NID:9288396; PID:9288397
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                                                                                     #superfamily macrophage inflammatory protein #length 125 #molecular-weight 13776 #check
##molecule_type mRNA
##residues 1-125 ##label YOS
##cross_references_GB:M37440; NID:9165469; PID:9165470
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Best Local Similarity 72.7%;
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                                                                                                                                                                                                     monocyte chemoattractant protein-2 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
17-Pba-1995 #sequence_revision 24-Peb-1995 #text_change
                                                                                                                                                                                                                                                                                                              Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 205:148-158
Porcine luteal cells express moncoyte chemoattractant protein-2 (MCP-2): Analysis by cDNA cloning and northern
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
   Score 77; DB 2; Length 109;
Pred. No. 2.74e-03;
3; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ##residues 1-99 ##label HOS
##experimental_source corpus luteum
CLASSIFICATION #superfamily macrophage inflammatory protein
FEATURE
                                                                                                                                                                                          #type complete
                                                                                                                                                                                                                                                                                                                                                                                                             analysis.
#cross-references MUID:95091716
#accession JC2417
Query Match
Best Local Similarity 66.7%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ##molecule_type mRNA
                                                                                           83 EICADPTQKWVQ 94
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| EICADPKERWVR 12
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                                                                                                                                                                                                                                                                                                                #authors
                                                                                                                                                                                                                                                                                                                                                     #journal
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REFERENCE
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DATE
                                                                                                                                                                                                                                                                                                                                                                    #title
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                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARY
                                                                                                                                                                                    ENTRY
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Search completed: Fri Feb 4 17:50:54 2000 Job time: 25 secs.

7

protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:49:54 2000; MasPar time 3.50 Seconds 72.823 Million cell updates/sec

rabular output not generated.

Run on:

>US-09-150-813-67 (1-12) from US09150813.pep 100 1 EICADPKERWVR 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

170751 seqs, 21266608 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

a-geneseq35
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part1 13:part11 13:part11 13:part13 13:part13 13:part13 14:part14 15:part14 15:part15 16:part16 17:part17 18:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part39 31:part31 32:part33 33:part33 33:part39 33:part39 33:part39 33:part39 33:part39 33:part39 Database:

Variance 70.039; scale 0.273 Mean 19.095; Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	8	-02	-02	70-6	20-6	60e-02	90e-01	90e-01	T0-6	≥-01	90e-01	a-01	e-01	000-01	3 6	TO-8	6-0T	90e-01	
	Pred.	1.53e-02	1.53e-02	1.53e-02	9.60e-02	9.606	1.906	1.906	1.906	1.906	1.906	1.90	1.90e-01	0		1.90e-UI	1.90e-01	1.90	
	Description	Chemoattractant MCP-2	Human beta-chemokine	Human MC proprotein.	Murine monocyte chemo	Mouse monocyte chemot	Drol3+ chemokine beta	Chemokine MCP-4 prote	Bac 3 chemokine betal	Bac 2 chemokine betal	Droll/2 chemokine bet	gar 1 chemokine betal	stom collising	[+ 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Human chemokine perai	Human monocyte chemoa	Monocyte chemotactic	uman chemokine beta-	naman anaman
	ΩI	R70804	W26655	W42072	W56088	W57322	W22675	W56690	W22673	W22672	M22674	173001	11022W	000/TM	W22670	W56087	W30191	10000	K9200/
	DB	13.	26	29	31	31	56	31	26	26	2 6	9 (9 6	7	56	31	28	1 6	7
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Monocyte chemoattract Monocyte chemoattract Monocyte chemoattract Monocyte chemoattract	De ag	(3-Ala) MCP-1. Monocyte chemotactic (28-Asp) MCP-1. (24-Arq) MCP-1.	man mo from hu PP-1.	yte chemo tant prot yte chemo recursor.	Amino acid sequence o pancreas expressed ch Human eotaxin. Human eosinocyte CC t Sequence of P6 precur Human monocyte chemoa
W13598 W13599 W13597 W13596	~ O O O O	R87677 R87680 R87675 R87675	W11131 P90292 R86859 W40174	P95387 R28663 R70800 R73914 R06398 R26580	W44721 W00667 W10099 W14990 R26581
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17 18 19 20	22 23 24 44	222 222 23 24 25 26 26 27	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

ALIGNMENTS

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                                                                                                                                                                                                                                                          Screening for cods. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13; Page 53; 60pp; English.
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                                                        Chemoattractant; MCP-2; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
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Best Local Similarity 91.7%; Pred. No. 1.53e-02;
Matches 11; Conservative 1; Mismatches 0; Indels
R70804 standard; Protein; 72 AA.
                                                                                                                                                                                                                                Hoogwerf AJ, Ledbetter SR;
WPI; 95-082239/11.
                      R70804;
29-AUG-1995 (first entry)
                                                                                                                                                           26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46 evcadpkerwvr 57
                                                       Chemoattractant MCP-2
                                                                                                                                                                                                                (UPJO ) UPJOHN CO
                                                                                                            Homo sapiens.
                                                                                                                               WO9504158-A.
09-FEB-1995.
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W26655 standard; Protein; 109 AA. W26655; RESULT

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Treatment of viral infection, e.g. HIV, and in wound healing of claim i. Page 12-13; 21pp; English.

This protein comprises human beta-chemokine HI305, also known as This protein comprises human beta-chemokine HI305, also known as This protein comprises human beta-chemokine HI305, also known as Claim i. Page 12-13; 21pp; English.

MCP-2. Its sequence was deduced from a claimed cDNA clone (see CDNA library. Also claimed are: (1) a host cell, preferably mammalian, transformed with a HI306 polynucleotide operably linked to an expression control sequence; (2) a recombinantly produced Specifically reacts with the HI305 protein. The HI305 protein and (3) a composition for the treatment of a mammalian subject (claimed). It is thought to have chemokine activities and canby be used in a composition for the treatment of any therefore have an effect on chemotraxis or migration of blood including replication of HIV, and may also be used for treatment of calls. It may be useful for inhibiting viral replication, wounds and to raise monoclonal and polyclonal antibodies which therefore the nation of HIV, and may also be used for treatment of specifically react with HI305. Such antibodies may be used for the protein from the nation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New human monocyte chemotactic proprotein - has homology to CC chemokine(s) useful for identifying agent for treating auto-immune diseases or allergic responses.

Claim ; Pages 38-39; 53pp; English.

The is a human monocyte chemotactic proprotein sequence. Its cDNA was first identified in Incyte clone 95517 from a breast cDNA library. Antisense nucleotides can be used to control human MCPP expression especially where it may lead to inappropriate monocyte or macrophage activity causing damage associated with allergic responses to organs such as the lungs. Antisense nucleotides and MCPP cDNA may be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
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Human monocyte chemotactic proprotein; MCCP; Incyte clone; allergy; macrophage; diagnostic assay; body fluid; lung; biopsy; autoimmune disease; AIDS; asthma; rheumatoid arthritis; NIDDM; breast cancer; bladder.
16-FEB-1998 (first entry) Human beta-chemokine H1305 (MCP-2). H1305; MCP-2; Chemokine; human; chemoattractant; chemotaxis; virus infection; HIV; therapy; wound healing; tumour; antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1arity 91.7%; Score 98; DB 26; Length 109; Conservative 1; Mismatches 0; Indels
                                                                                                                                                               12-JAN-1996; US-586395.
(GEMY ) GENETICS INST INC.
Lavallie ER, MCCOY JM, Racie LA;
WPI; 97-372866/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-JAN-1998.
15-JUL-1997; U12349.
15-JUL-1996; US-683655.
(INOY-) INCXTE PHARM INC.
Au-Young J, Coleman R, Hillman JL;
WPI; 98-110529/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .r 3
W42072 standard; Protein; 109 AA.
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                                                                                                                                                  10-JAN-1997; U00379.
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Best Local Similarity
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WO9802459-A1.
                                                                                                                               -JUL-1997
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Products for treating e.g. cancers, infections, asthma, cystic fibrosis, rhinitis, atheroscierosis or inflammatory bowel disease can produce represents murine monocyte chemoattractant protein 5 (MCP-5). The MCP-4 and MCP-5 have activity in stimulating chemotactic cactivity. The proteins can be used for treating cancers, e.g. a cirrity. The proteins a lump or gastrointestinal tract, or car be used for treating or astrointestinal tract, or infectious disease such as AIDS or malaria. Antagonists to the proteins can be used for treating e.g. asthma, chronic obstructive pulmonary can be used for treating e.g. asthma, chronic obstructive pulmonary concerns concerns and the proteins concerns and the proteins concerns and the colerosis, infinitis, atherosclerosis, continuore phritis, multiple sclerosis, infinitis, atherosclerosis, contractions may also be treated with a molecule that inhibits where the concerns and concerns
in diagnostic assays of body fluids or biopsied tissues to detect expression levels of MCPP. MCPP cDNA may also be useful for treatment of disorders such as asthma, rheumatoid arthritis, NIDDM or cancer of the breast or bladder. Human MCPP protein can be used to MCPP in allergic responses or inhibitors to modulate the activity of Sequence 109 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-AUG-1998 (first entry)
Murine monocyte chemoattractant protein 5.
Murine; mouse; monocyte chemoattractant protein; MCP-4; MCP-5; chemokine; immune response; cancer; AIDS; malaria; parasitic infection.
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                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                               Score 98; DB 29; Length 109,
Pred. No. 1.53e-02;
1; Mismatches 0; Indels
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30-SEP-1997. U17900.
30-SEP-1996, US-027128.
(GHO) GEN HOSPITAL CORP.
Garcia-Zepeda E, Luster AD, Sarafi M;
WEI; 98-240080/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             W56088 standard; Protein; 104 AA.
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Best Local Similarity 91.78;
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nes 10; Conservative
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08-NOV-1996; US-744419.
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WO9814573-A1.
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N-PSDB; V30/89, V30/90.

N-PSDB; V30/89, V30/90.

Monocyte chemotactic protein-5 - used to develop products for treating e.g. immune system disorders, infections, inflammation, treating e.g. immune system disorders, infections, inflammation, allergy cardiovascular disease or tumours

Claim 28; page 79; 101pp; English.

Claim 28; page 79; 101pp; English.

The present sequence represents monocyte chemotactic protein 5 (MCP-5).

The MCP-5 protein stimulates chemotaxis of eosinophils, monocytes and consinophil. monocyte-and/or lymphocyte-mediated inflammations.

Consinophil. monocyte-and/or lymphocyte-mediated inflammations.

Consinophil. monocyte-and/or lymphocyte-mediated inflammations.

Consinophil. monocyte-and/or lymphocyte-mediated inflammations.

Consinophil. monocyte-and/or lymphocyte-mediated inflammation.

Consin
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The polypeptide encoding chemokine beta 4 and monocyte chemotactic protecting to treat tumours, autoimmune disease, infection, protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis

Example 11; Fig 5: 83pp; English.

The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotactic protein 4 (MCD-4) Droil+ variant, which can monocyte chemotactic protein 4 (MCD-4) Droil+ variant, which can monocyte chemotactic protein 4 (MCD-4) Droil+ variant, which act of chemotactic protein 4 (MCD-4) Droil+ variant, which can present activities to the tall of tall of the tall of the tall of the tall of t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 104;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 90; DB 31; I
Pred. No. 9.60e-02;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T
W22675 standard; Protein; 71 AA.
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                                                            Gonzalo J, Gutierrez-Ramos J;
WPI; 98-217264/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Conservative
                          (BLOO-) CENT BLOOD RES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
                                                                                                                                    N-PSDB; V30789, V30790.
18-SEP-1996; US-026882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72 eicadpkekwyk 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EICADPKERWVR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, ung inflammation and atherosclerosis. Ck betal0 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                     Gaps
                                                                                                                                                                                                             chemokine MCP-4 protein sequence. MCP-4; MCP-4; MCP-4 mCP-7 antagonist; agonist; inflammatory disease; viral; bacterial; parasite; infection; allergic reaction; asthmatic; atherosclerosis; arthritis; chemokine.
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Pred. No. 1.90e-01;
2; Mismatches 0; Indels
                                                                               Score 87; DB 26; Length 71;
Pred. No. 1.90e-01;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                  (SMIK ) SMITHKLINE BEECHAM PLC.
Bergsma D, Berkhout T, Elshourbagy N, Groot PHE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   be used for detection and diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UT 8 W22673 standard; Protein; 75 AA.
                                                                                                                                                                                                                                                                                                       (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                     W56690 standard; Protein; 75 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                     87.0%;
                                                                                              Sest Local Similarity 83.3%;
fatches 10; Conservative
                                                                                                                                                                                                         23-JUL-1998 (first entry)
                                                                                                                                                                                                                                                                              05-MAR-1998.
27-AUG-1997; G02313.
28-AUG-1996; GB-017923.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49 eicadpkekwvg 60
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                                                                                                                            45 eicadpkekwvg 56
                                                                                                                                              1 EICADPKERWVR 12
                                                                    71 AA;
                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                     Query Match
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Example 11; Fig 5: 83pp; English.

Example 11; Fig 5: 83pp; English.

The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotractic protein 4 (MCP-4) Bac 3 variant, which can be used to treat betalow while ack betalo.

The present sequence oxcessive levels of Ck betalo.

The present can be used to reduce excessive levels of Ck betalo.

The promotes wound healing, regulates haematopoies asthma, fibrotic or should healing, regulates haematopoies and generates antibodies. Labelled Ck betalo can be used to identify its cognate compounds for (arb) agonist activity. The antagonist can be used to screen treat rheumatoria arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and syndrome, lung inflammation and atherosclerosis. Ck betalo CDNA can and for chromosome identification.

The used to isolate genes encoding similar peptides, in gene therapy or sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                            Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis
                 19-MAR-1998 (first entry)
Bac 3 chemokine betal0 or monocyte chemotactic protein 4 variant. Human; chemokine betal0 or keal0, treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; neuronist, MCP-4; Bac 3 variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,
Parmelee D, White J;
WPI: 97-435153/40.
Polypeptide encoding chemokine beta 4 and monocyte chemotactic
Protein 4 - useful to treat tumours, autoimmune disease, infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bac 2 chemokine betal0 or monocyte chemotactic protein 4 variant. Bac 2 chemokine betal0 or monocyte chemotactic protein 4 variant. Influman; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Bac 2 variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 87; DB 26; Length 75;
Pred. No. 1.90e-01;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                         23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH, Parmelee D, White J;
WPI: 97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W22672 standard; Protein; 77 AA.
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Conservative
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                                                                                                                                                                                   Homo sapiens.
WO9731098-A1.
W22673;
19-MAR-1998
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Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotactic protein 4 (MCP-4) Bac 2 variant, which can be used to treat patients deficient in Ck betal0, while a Ck betal0 attagonist can be used to treat leukaemia, solid tumours, chronic or betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases. It also diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betal0 can be used to identify its cognate compounds for carbigatomist activity. The antagonist can be used to screen treat rheumatoid arthritis, autoimmune, chronic inflammatory or bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic be used to isolate genes encoding similar peptides, in gene therapy confidence. The chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 11; Fig 5: 83pp; English.

The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotractic protein 4 (MCP-4) Drol1/2 variant, which can monocyte chemotractic protein 4 (MCP-4) Drol1/2 variant, which can be used to treat leukaemia, solid tumours, chronic or betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmend diseases. It also diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betal0 can be used to identify its cognate compounds for (art)agonist activity. The antagonist can be used to creeptor, while cells expressing the receptor can be used to screen treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prosteglandin dependent fever and syndrome, lung inflammation and atherosclerosis. Ck betal0 cDNA can can gent to isolate genes encoding similar peptides, in gene therapy contracts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Droll/2 chemokine betall or monocyte chemotactic protein 4 variant. Human; chemokine betall, ck betall, treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; wound healing; haematopolesis neurodegenerative disease; wound healing; haematopolesis requiation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Droll/2 variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 87.0%; Score 87; DB 26; Length 77; Best Local Similarity 83.3%; Pred. No. 1.90e-01; Matches 10; Conservative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,
Parmelee D, White J;
WPI: 97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W22674 standard; Protein; 79 AA.
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23-FEB-1996; UO2598.
23-FEB-1996; WO-UO2598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51 eicadpkekwvg 62
                                                                                                                                                                                                                                                                                                                                                                                                              77 AA;
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24-OCT-1995; US-006051.
(SMIK ) SMITHKLINE BEECHAM CORP.
Kreider BL, Li H, Pelus L, Wh
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82 AA;
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Example 11; Fig 5; 83pp; English.

Example 12; Fig 5; 83pp; Fig 5; Fig 5
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Stem cell mobilising chemokine creation; colony stimulating factor; Hacmatopoietic cell; parasitic infection; colony stimulation; hacmatoregulator; immune response; bacterial infection; transplant; hacmatoregulator; immune response; bacterial infection; regeneration; neoplastic disease; viral disease; gene therapy; cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,
Parmelee D, White J;
WPI: 97-435153/40
Polypeptide encoding chemokine beta 4 and monocyte chemotactic
protein 4 - useful to treat tumours, autoimmune disease, infection,
                                                  Gaps
                                                                                                                                                                                                                                                                                                                     "19-MAR-1998 (first entry)
Bac 1 chemokine betail or monocyte chemotactic protein 4 variant.
Buman; chemokine betail or betail0; treatment; antagonist;
Human; chemokine betail0; Ck betail0; treatment; antagonist;
solid tumour, infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
fibrotic disease; psoriasis; neurodegenerative disease;
chandling; hematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4; Bac 1 variant.
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larity 83.3%; Pred. No. 1.90e-01;
Conservative 2; Mismatches 0; Indels
        Pred. No. 1.90e-01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W17665 standard; peptide; 82 AA.
                                                                                                                                                                                                                                                                W22671 standard; Protein; 82 AA. W22671;
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                              Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-FEB-1996; U02598.
23-FEB-1996; WO-U02598
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23-OCT-1996; U16959.
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                                                                                                               53 eicadpkekwvg 64
                                                                                                                                           82 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09715594-A1.
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The present sequence represents a chemokine, CKbeta-10, which is capable of mobilising stem cells. The chemokine can be used therapeutically to improve stem cells. The chemokine can be used therapeutically to stimulating factor or other haematoregulatory agent. It can be used wherever an increased level of haematopoietic cells is needed, e.g. to increase the immune response to chronic infection (particularly patients with reduced bone marrow function as a result of mannatosuppressive treatment or disease, and to provide more rapid immunosuppressive treatment or disease, and to provide more rapid regeneration of bone marrow after treatment for neoplastic or viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diseases. The induced stem cells may be harvested for subsequent return to the patient, optionally after they have been genetically manipulated to deliver a selected gene product (gene therapy). The cells may be co-administered with a cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      healing, regulates haematopoiesis and generates antibodies.
Labelled Ck betail can be used to identify its cognate receptor,
while cells expressing the receptor can be used to screen compounds
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The present sequence is human chemokine betal0 (Ck betal0) or the present sequence is human chemokine betal0 (and be used to treat monocyte chemotactic protein 4 (MCP-4), which can be used to reduce excessive levels of Ck betal0 antagonist can be used to reduce excessive levels of Ck betal0. Ck betal0 can be used to retar leukaemia, solid tumours, chronic or opportunistic used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chemokine betal0 or monocyte chemotactic protein 4.

Human chemokine betal0 or monocyte chemotactic protein 4.

Human; chemokine betal0, Ck betal0; treatment; antagonist;

Solid tumour; infection; autoimmune disease; asthma; antibody;

Fibrotic disease; psoriasis; neurodegenerative disease;

wound healing; haematopoiesis regulation; gene therapy;

chromosome identification; monocyte chemotactic protein 4;

leukaemia; MCP-4.
                         WPI: 97-258956/23.
WPI: 97-258956/23.
Ten new chemokine(s) able to mobilise stem cells - used where Increased levels of haematopoietic cells are required, e.g. to increase resistance to infection claim 7; Page 11-12; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 87; DB 24; Length 82; Pred. No. 1.90e-01;
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N-PSDB; T85029.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Mismatches
White JR;
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/label= sig_peptide
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(HUMA-) HUMAN GENOME SCI INC.
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Best Local Similarity 83.3%;
Matches 10; Conservative
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products for treating e.g. cancers, infections, asthma, cystic fibrosis, rhinitis, atherosclerosis or infections, asthma, cystic claim 8; page 53; 106pp; English.

The present sequence represents human monocyte chemoattractant protein (WCP-4). The MCP-4 and MCP-5 have activity in stimulating chemotactic activity. The Proteins can be used for treating cancers, e.g. a sarrooma, a tumour within the lung or gastrointestinal tract, or sarrooma, a tumour within the lung or gastrointestinal tract, or can be used for treating e.g. ablanca as a first of the proteins of sarrooms, a such as AlbS or malaria. Antagonists to the proteins can be used for treating e.g. asthma, chronic obstructive pulmonary glomerulonephritis, multiple sclerosis, inflammatory bowel disease, arthritis or adult respiratory distress syndrome. Infections such as MCP-4 or MCP-5 expression.
                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
for (ant)agonist activity. The antagonist can be used to treat infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betal0 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractant proteins, MCP-4 and MCP-3 - used to develop
                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                            17-502-1998 (first entry)
Human monocyte chemoattractant protein 4.
Human; monocyte chemoattractant protein; MCP-4; MCP-5; chemokine;
immune response; cancer; AIDS; malaria; parasitic infection.
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0
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Monocyte chemotactic protein 5.
Monocyte chemotactic protein 5.
Chemokine; inhibitor; antiinflammatory; atherosclerosis;
Clohm's disease; arthritis; angiogenesis; tumour; metastasis;
Homo sapiens.
                                                                                                                                                        Score 87; DB 26; Length 98;
Pred. No. 1.90e-01;
2; Mismatches 0; Indels
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Pred. No. 1.90e-01;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
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                                                                                                                                                      87.0%;
                                                                                                                                                                  Local Similarity 83.3%;
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les 10; Conservative
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This polypepticae comprises numan macrophage-derived monocyte chemotactic protein-5 (MCP-5), a novel C-C chemokine. Its amino acid sequence was deduced from a cDNA clone (see 190880 and T90883) isolated from a human macrophage cDNA library. A claimed method for producing MCP-5 comprises culturing a host cell that is stably transformed or transfected with McP-5 polynucleotide. Also claimed is a hybridoma that produces a monoclonal antibody (MAb) that is specifically reactive with the mature MCP-5. MCP-5 (or its analogues and produces a monoclonal antibody (MAb) that is specifically reactive with the mature MCP-5. MCP-5 (or its analogues and wounds or infections, while its inhibitors (e.g. the MAb) are useful as anti-inflammatories in cases of e.g. arthritis and angiogenesis and tumour growth (or metastasis). The MCP-5 inhibitors can possibly also be used to reduce the damaging effects inhibit replication of HIV. MCP-5 can also be used to identify and thibit replication of HIV. MCP-5 can also be used to identify ceeptors) are used to modulate MCP-5 peptides (or the analogues or mananes as an analogues or seminanes and antagonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                     Polynucleotide encoding monocyte chemotactic protein-5 - useful in treatment of e.g. inflammation, atherosclerosis, angiogenesis and
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Pred. No. 1.90e-01;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                           Claim 1; Page 36-37; 47pp; English.
This polypeptide comprises human macrophage-derived
      /label= Sig_peptide
24..98
                                           /label= Mat_protein
                                                              /note= "(Claim 4)"
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Best Local Similarity 83.3%;
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                                                                                                                                            US-622851.
                                                                                                   02-OCT-1997.
26-MAR-1997; U04898
                                                                                                                                                                                  Gray PW;
                                                                                                                                                                                              WPI; 97-489645/45.
                                                                                                                                                           (ICOS-) ICOS CORP.
                                                                                                                                                                                                                 N-PSDB; T90880.
                                                                              WO9735982-A2.
                                                                                                                                          27-MAR-1996;
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                        Protein
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Search completed: Fri Feb 4 17:50:12 2000 Job time : 18 secs.

72 eicadpkekwvg 83

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1 EICADPKERWVR 12

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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:57:30 2000; MasPar time 5.04 Seconds 129.952 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-68 (1-12) from US09150813.pep 97 Description: Perfect Score:

1 DICADPKKKWVQ 12 Sequence:

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus sptremb19 Database:

Mean 25.541; Variance 34.851; scale 0.733

Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	3.08e-04	3.08e-04	2 296-03	20 252 6	20,100,00	6.15e-05	1.63e-02	1.63e-02	1.63e-02	2 646-02	250-030	20 20 20 20 20 20 20 20 20 20 20 20 20 2	0.83e-02	6.83e-02	6 83e-02	10000	1.000	1.09e-01	1.09e-01	1 000-01	1.0.0.0	7.7.6-01	2.77e-01	4.386-01	
	Description	NEUROTACTIN.	TAT VIATOR	FRACIALITE:	RANTES PRECURSOR.	ORF K6.	BETA CHEMOKINE EXODUS-	CC CHEMOKINE ABCD-1.	CC CHEMOKINE ST38 PREC	INTERLETIKIN-8 (FRAGMEN		MPIF-2.	IL-10-INDUCIBLE CHEMOR	1,D78 ALPHA BETA PRECUR	TAMBHOTACTIN PRECURSOR	DIMERCHANICATION TO THE TOTAL OF THE TOTAL O		MACROPHAGE-DERIVED CHE	CHEMOKINE EXODUS.	SHOOKE BY DAG OF	CC CHEMONIAN ENGLOS	B LYMPHOCYTE CHEMOAIIA	CX3C CHEMOKINE PRECURS	CODED FOR BY C. ELEGAN	COULT CANTELLED A CE	CHITIN SINIERINSE I:
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ALIGNMENTS

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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.;
"Molecular mimicry of human cytokine and cytokine response pathway genes by KSHV.";
                  SERGIN-BLAC: TESCHE-BRAIN;
ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
ZLONIK A., BAZAN J.F.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL: U92565; G2459677; ---
EMBL: PF00048; 118; 1.

SEQUENCE 395 AA: 42040 MW; 3997A113 CRC32;
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0
                                                                                                                        Score 77; DB 11; Length 395;
Pred. No. 3.08e-04;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 73; DB 4; Length 91;
Pred. No. 2.29e-03;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                      JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF043341; G2905632; -.
EMBL; AF088219; G3719366; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                 LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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GAMMAHERPESVIRINAE; RHADINOVIRUS.
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08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                  91 AA.
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CF404FAD CRC32;
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                                                                                                                                                                                                                                                          01-NOV-1998 (TREMBLREL. 06, CREATED)
01-NOV-1998 (TREMBLREL. 06, LAST SEQU
SCYAS.
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01-FEB-1997 (TREWBLREL. 02, CREATED)
01-JUL-1997 (TREWBLREL. 04, LAST SEQU
01-NOV-1998 (TREWBLREL. 08, LAST ANNC
                                                                                                                                                                                                                                                 PRT;
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Local Similarity 81.8%;
les 9; Conservative
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SEQUENCE 91 AA; 9990 MW;
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[1]
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SEQUENCE FROM N.A.
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                       SEQUENCE FROM N.A.
MEDLINE; 97121480.
RUSSO J.J., BOHRNZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
PRISSO J.J., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
"Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
BUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                           RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.,
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                   SEQUENCE FROM N.A.
NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
HENDRICKSON S., GUO H.G., HAXWARD G.S., REITZ M.S.;
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE, 97400322.
HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
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NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74.2%; Score 72; DB 14; Length 95; 66.7%; Pred. No. 3.76e-03; ative 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.; SUGMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUN R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U74585; G1658273; ---
EMBL; U74585; G1658273; ---
EMBL; U74586; G2246546; ---
EMBL; U74586; G3551763; ---
EMBL; U7166; G3551763; ---
PENAL, PF00048; 118; 1.
                                                                                                                 PROC. NATL. ACAD. SCI. U.S.A. 93:14862-14867(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10485 MW; 5283348D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT; 134 AA.
SCIENCE 274:1739-1744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                pathogenicity?";
J. VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           larity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL PROTEIN. SEQUENCE 95 AA; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74 QICADPSKNWVR 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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Best Local Similarity
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000585
000585;
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display, is upregulated in brain inflammation."; J. NEUROIMMUNOL. 0:0-0(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ::| :| | |||||
1 DICADPKKKWVO 12
                                                                                                                                                                                                                                 74 VCADPKQNWV 83
                                                                                                                                                                                                                                                  :||||| :||
2 ICADPKKKWV 11
                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                   LT 8
062812
062812;
                                                                                                                 SIGNAL.
                                                                                                                                                                                                          Matches
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNAȚHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                               CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE: 9835331.

MEDLINE: 9835331.
SCHALLUSTO F., SPELETAS M., RUEDL C., SCHAIEL C., PARDALI E., SALLUSTO F., MELCHERS F., ROLINK A.G., SIDERAS P.; ROLINE A.G., SIDERAS P.; ANDERSSON J., MELCHERS F., ROLINE A.G., ACTIVATED murine B lymphocytes and dendritic cells produce a novel C. chemokine which acts selectively on activated T cells."; J. EXP. MED. 188:451-463(1998).

EMBL, APO52505; G3378116; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                       0; Gaps
                                                                                                 SEQUENCE FROM N.A.

NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., TAKAGI S.,
NISHIMURA M., KAKIZAKI M., NOMIYAWA H., YOSHIE O.;
NISHIMURA M., KAGIZAKI M., NOMIYAWA H., YOSHIE O.;
SUBMITTED (406-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, 98320; G2196920; -.
EMBL, AF001979; G2644925; -.
EMBL, AF001979; D1022673; -.
PFAM: PF00048; 118; 1.
SEQUENCE 134 AA; 14646 MW; FE86A239 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LESSLAUER W.; "A novel rat CC chemokine, identified by targeted differential
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 71.1%; Score 69; DB 11; Length 92; Local Similarity 72.7%; Pred. No. 1.63e-02; nes 8; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                           Score 71; DB 4; Length 134;
Pred. No. 6.15e-03;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                        HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10302 MW; BC7219A0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                   92 AA.
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01-NOV-1998 (TREMBLREL. 08, LAST SEQU
01-NOV-1998 (TREMBLREL. 08, LAST ANNO
CC CHEMOKINE ST38 PRECURSOR.
LARC.
                                                                                                                                                                                                                                                                                                                                                                   PRT;
                     J. IMMUNOL. 159:1589-1593(1997)
                                                                                                                                                                                                                                  / Match 73.2%;
Local Similarity 66.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 DICADPKKKWV 11
                                                                                                                                                                                                                                                                                       73 ELCADPKELWVQ 84
                                                                                                                                                                                                                                                                                                                  1 DICADPKKKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
TISSUE-LIVER;
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                                                   SECUENCE FROM N.A
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088430
088430;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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J. EXP. MED. 0:0-0(0).

EMBL; U85768; G1916252; -.

PFAM, PFO048; L18; 1.

PFAM, FCOMO48; L18; 1.
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PERISSODACTYLA; EQUIDAE; EQUUS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 71.1%; Score 69; DB 6; Length 97; Best Local Similarity 50.0%; Pred. No. 1.63e-02; Matches 6; Conservative 3; Mismatches 3; Indels
                                                                                                                                                                                        Length 97;
                                                                                                                                                                                                            Pred. No. 1.63e-02;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
TISSUE-BRONCHOALVEOLAR TISSUE;
FRANCHILI M.;
SUBMITTED (AFR-1988) TO EMBL/GENBANK/DDBJ DATA BANKS.
BHBL; AF06237; G3126973; -..
NON TER.
SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; APO53313; G3551819; -.
EMBL; AJ007862; E1312757; -.
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01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 (FRAGMENT).
                                                                                                     POTENTIAL.
CC CHEMOKINE ST38.
053405BD CRC32;
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                                                                                                                                                                                                71.1%; Score 69; DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT; 119 AA.
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01-JUL-1997 (TREMBLREL. 04, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                     SIGNAL 1 27
CHAIN 28 97
SEQUENCE 97 AA; 10826 MW;
                                                                                                                                                                                                            Query Match 71.1%;
Best Local Similarity 70.0%;
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057411
057411;
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093238
093238;
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                                                                                                                                             HOMO SAPIENS (HUMAN).
EUKARYOTA: METAZOA: CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CAȚARRHINI; HOMINIDAE; HOMO.
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04745
014745
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014745
01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1996 (TREMBLREL. 09, LAST SEQUENCE UPDATE)
01-NOV-1996 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
LD78 ALPHA BETA PRECURSOR (FRAGMENT).
HOMO SAPIENS (HUMAN).
EUKARYOTA, METAZOA, CHORDATA, VERTEBRATA; MAMMALIA, EUTHERIA; PRIMATES;
         Gaps
                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE: 98308096.
YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR.,
HANGOC G., KWON B.S.;
"Isolation and characterization of LMC, a novel lymphocyte and
monocyte chemoattractant human CC chemokine, with myelosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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0
                                                                                                                                                                                                                                         SHOUDAL K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T., YOSHIE O., NOMIYAMA H.; BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                                                                                                                  Structure of a region of 181 kb containing five CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
       2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                                                                 SEQUENCE FROM N.A.
HEDRICK J.A., HELMS A., GORMAN D., ZLOTNIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                           01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                    SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                activity.;
BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
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Local Similarity 41.7%; Pred. No. 4.25e-02;
les 5; Conservative 5; Mismatches 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE 120 AA; 13600 MW; A079DF66 CRC32;
    3; Mismatches
                                                                                120 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Mismatches
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 7; Conservative
                                                                                                                         IL-10-INDUCIBLE CHEMOKINE.
                                                                            PRELIMINARY;
                  72 QFCGDPKQEWVQ 83
                                     1 DICADPKKKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 EVCTNPNDDWVQ 85
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TISSUE=BRAIN;
                                                                                                                                            HOMO SAPIENS
                                                                                                                                                                                                                                  TISSUE=LIVER;
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Matches
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EUKARYOTA, METAZOA; CHORDATA, VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; CYPRININAE; CYPRINIOS.
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ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K.,
KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA R.,
MIYAKAWA T.;
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01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANDATE)
01-JUN-1998 (T
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"cDNA cloning of a carp CC chemokine homologous to mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 66; DB 4; Length 80;
Pred. No. 6.83e-02;
2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Y Match 68.0%; Score 66; DB 13; Length 97; Local Similarity 63.6%; Pred. No. 6.83e-02; hes 7; Conservative 0; Mismatches 4: Indele
                                                                                                            SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; D63785; D1010501; --
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF006742; G2827882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AB010469; D1032417; -.
SEQUENCE 101 AA; 11266 MW; 9CFBD540 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST SNOOTATION UPDATE)
CC CHEMOKINE-1.
                                                                                                                                                                                                                                                                                                                                                                                                           LD78 ALPHA BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
LYMPHOTACTIN.
3290101C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3F87F1C6 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
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16
>80
80
8857 MW;
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Best Local Similarity 58.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
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<1
17
80
80 AA;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                             ö
                                                                                                                                                                                                                                        HONO SAPIENS (HUMAN).
BUKARYOTA; METALOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M., ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M., WEANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; Homo sapiens Chromosome 16 BAC clone CIT987SK-A-152E5."; SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; 0831215, G1931581; EMBL; G193299; G2062425; EMBL; G193299; G2062425; EMBL; MC004382; G3252820; ...
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                        CHANG M.S., MCNINCH J., ELIAS III C., MANTHEY C.L., GROSSHANS D., MENG T., BOONE T., ANDREW D.P.; SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                  GODISKA R., CHANTRY D., RAPORT C.J., SOZZANI S., ALLAVENA P. MANTOVANI A., GRAY P.W.;
J. EXP. MED. 185:0-0(0).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 24 POTENTIAL.
25 93 MACROPHAGE-DERIVED CHEMOKINE.
93 AA; 10580 MW; 65EA63D2 CRC32;
 Length 101;
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Pred. No. 1.09e-01;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
Score 66; DB 13; Length 101
Pred. No. 6.83e-02;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NAY-1997 (TREMBLREL. 03, CREATED)
01-NAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDAIE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                         01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
MACROPHAGE-DERIYED CHEMOKINE PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95 AA
                                                                                                                                               93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67.0%;
    Query Match
Best Local Similarity 54.5%;
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
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MEDLINE; 97275143.
                                                                72 EFCSDPKLRWV 82
                                                                               ::|:||| :||
1 DICADPKKKWV 11
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                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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099664;
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000626
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Gaps
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                                                                                          Score 65; DB 4; Length 95;
Pred. No. 1.09e-01;
2; Mismatches 2; Indels
                                                       10691 MW; 1526B4C0 CRC32;
EMBL; U64197; G1778717; -.
PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
SEQUENCE 95 AA; 10691 MW; 1526B4C0 CI
                                                                                                                                                                                                                                                                       Search completed: Fri Feb 4 17:58:25 2000
                                                                                              Query Match 67.0%;
Best Local Similarity 60.0%;
Matches 6; Conservative
                                                                                                                                                                               72 VCANPKQTWV 81
                                                                                                                                                                                                                  2 ICADPKKKWV 11
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:56:21 2000; MasPar time 3.58 Seconds 134.279 Million cell updates/sec Tabular output not generated.

>US-09-150-813-68 (1-12) from US09150813.pep 97 Description: Perfect Score: Sequence: Title:

1 DICADPKKKWVQ 12

122810 seqs, 40068593 residues PAM 150 Gap 15 Searched:

Scoring table:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

Mean 24.895; Variance 36.317; scale 0.685 pir60 1:pir1 2:pir2 3:pir3 4:pir4 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	7.77e-08	3.65e-07	3.65e-07	1.01e-06		4.62e-0b	1.26e-05	1.26e-05	•	٠		9.08e-05	9.08e-05	9.08e-05		10001	٠,	٠,	1.48e-04	1.48e - 04	1.48e-04	3.90e-04	c	200000	\$0.2TG.0
Description	eotaxin precursor - h	precursor -		monocyte chemoattract	monocyte chemoattract		monocyte chemoattract	monocyte chemoattract	monocyte chemoattract	monocyte chemotactic	immediate-early serum	monocyte chemoattract	Neutrophil attractant	monogyte chemoattract	MONOCY CO CANCELLANCE	monocyte chemica tract	•	, 00	interleukin 8 - sheep	alveolar macrophage c	interleukin-8 precurs	macrophage inflammato	macropings restanted	מא	interleukin-8 - rabbi
Ω	TC4912	JC2478	148099	A60299	JC2136	A30209	A39296	JC2336	146857	A54678	507733	TC2417	871871	140140	74014/	A46539	JN0841	146997	S42496	A44253	A53096	10000	77C7CT	JC5295	146871
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2.63e-03 6.70e-03 6.70e-03 6.70e-03 6.70e-03 1.07e-02 1.07e-02 6.61e-02 6.61e-02 6.61e-02 6.61e-02 6.61e-02 6.51e-01 9.20e-01 9.20e-01 1.41e+00	3.25e+00 3.25e+00
monocyte chemoattract interleukin-8 homolog pre-B-cell growth-sti cytokine SDF-1-beta - cytokine SDF-1-beta - cytokine - mouse macrophage inflammato interleukin-8 precurs lymphocyte and monocyte macrophage inflammato macrophage inflammato cophage inflammato inflammato cophage inflammato inflammato activation gen chitin synthetase I monocytic cytokine FI ransformation-induce RSV-induced protein - ransformation-induce iransformation-induce iransformation-induce iransformation mouse I ymphotactin recens	hypothetical protein SERA antigen/papain-l
A28815 153416 A53497 A533497 181182 181182 A32393 A33393 A33393 A330574 B35673 ETMSL ETMSL A46730 A46093 A26736 150417 S24236 S24236	S67061 G71617
100000000000000000000000000000000000000	22
91 89 93 93 92 92 92 92 92 92 92 92 92 91 103	397
73.3.3.3.3.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	58.8
711 711 711 711 711 711 711 711 711 711	57
40000000000000000000000000000000000000	444

ALIGNMENTS

	.,	JC4912 preliminary e_type mRNA is 1-97 ##label BAR seferences EMBL:275668; NID:91531982; PID:e251275; PID:91 nental_source dermal fibroblast nental_source dermal fibroblast sprotein has eosinophil specific chemotatic activity. #superfamily macrophage inflammatory protein fibroblast	#domain signal sequence #status predicted #label SIG\ #product eotaxin #status predicted #label MAT #product eotaxin #status predicted #label MAT #length 97 #molecular-weight 10790 #checksum 448 ttch 96.9%; Score 94; DB 2; Length 97; cal Similarity 91.7%; Pred. No. 7.77e-08; 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;		2 JC2478 #type complete eotaxin precursor - rat #formal_name Rattus norvegicus #common_name Norway rat #formal_name Rattus norvegicus #common_name Rat
RESULT 1 ENTRY TITLE ORGANISM DATE ACCESSIONS	REFERENCE #authors #journal	#accession #status ##status ##residues ##rross re ##cross re ##cro	FEATURE 1-18 19-97 SUMMARY Query Match Best Local Matches	71	RESULT ENTRY FITTLE TORGANISM DATE ACCESSIONS REFERENCE # authors

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##cross-references EMBL:X77603; NID:9602551; PID:9602552
This protein is identified as a potent eosinophil chemoattractant.
FICATION #superfamily macrophage inflammatory protein
DS 91yoprotein
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#title Constitutive and allergen-induced expression of eotaxin mRNA
#cross references MUID:95173589
Biochem. Biophys. Res. Commun. (1994) 205:788-794
Ectaxin: Cloning of an eosinophil chemoattractant cytokine
and increased mRNA expression in allergen-challenged
                                                                                                                                                                                                                                                                                  #domain signal sequence #status predicted #label SIG\
#product ectaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               eotaxin precursor - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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20-reb-1993 #sequence_revision 20-reb-1993 #text_change
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A34561; I57488; JC1096
                                                                                                                                                                                                                                                                                                                                                                 #length 96 #molecular-weight 10695 #checksum 7329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ##cross-references EMBL:U18941; NID:g687655; PID:g687656
FICATION #superfamily macrophage inflammatory protein
#length 96 #molecular-weight 10753 #checksum 7236
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Pred. No. 3.65e-07;
0; Mismatches 0; Indels
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Pred. No. 3.65e-07;
0; Mismatches 0; Indels
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                                                               guinea-pig lungs.
#cross-references MUID:95091818
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Local Similarity 100.0%;
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Follins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a monocyte secretory
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                         #title Structure of human monocyte chemotactic protein gene and its
#cross_references MUID:90290466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman,
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                                                                                                                                                                                                                                                                                                                                                                                   ##residues 1-99 ##label ROL
##CIOSS-Ieferences GB:M30816; GB:M31625; GB:M31626; NID:9188701;
Biochem. Biophys. Res. Commun. (1990) 169:346-351
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#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references WUID:92095166
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##cross-references GB:M24545; NID:9187434; PID:9307163
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##experimental_source glioma cell line U-105MG
NCE 151841
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FEBS Lett. (1989) 244:487-493
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#accession A32300
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Damme, J.

#journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
#title Identification of the monocyte chemotactic protein from human state osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.
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#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                         Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E. Mol. Call. Biochem. (1993) 126:61-68
The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
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#product monocyte chemoattractant protein 1 #status
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#modified_site pyrrolidone carboxylic acid (Gln) (in
mature form) #status experimental\
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chemoattractant, a putative mediator of cellular immune
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflammatory protein
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Pred. No. 1.01e-06;
1; Mismatches 1; Indels
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##residues 24-28,'Q',30-99 ##label YEQ
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##residues /X',25-99 ##label ROB
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##molecule_type mRNA
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| 1-99 ##label LIY
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Kawahara, R.S.; Deuel, T.F.
J. Biol. Chem. (1989) 264:679-682
J. Biol. Chem. (1989) 264:679-682
Platelet derived growth factor-inducible gene JE is a member
of a family of small inducible genes related to platelet
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#product monocyte chemoattractant protein-1 #status
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Scheit, K.H.
Biochem. Blophys. Res. Commun. (1994) 199:962-968
Biochem. Liophys. Res. Commun. (1994) 199:ede-968
Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
and cDNA cloning.
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##residues
##cross-references GB:M19681; NID:9193486; PID:9387168; GB:M19682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 predicted
#length 99 #molecular-weight 10976 #checksum 9768
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                                                                                                                                                                                                                                                                                                       ##residues 1-99 ##label ZAC ##cross-references EMBL:X79416; NID:9872312; PID:9872313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
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                                                                                                                                                                                                           Zach, O.
submitted to the EMBL Data Library, July 1994
                                                                                                                                                                                                                                                                                                                                             #superfamily macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 88; DB 2; Le
Pred. No. 1.68e-06;
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#cross-references MUID:88234501
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##residues 1-148 ##label KA2
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                                                                                                                                                                 -99 ##label HOS
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                                                                                              #cross-references MUID:94183284
#accession JC2136
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Best Local Similarity 75.0%;
Matches 9; Conservative
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                                                                                                                                                 ##molecule_type mRNA
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#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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                                                                                                                                                                                                                                                                                                          #authors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and CDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine #cross-references MUID:92096117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           monocyte chemoattractant protein 1 precursor - bovine monocyte chemotactic factor 1; seminal plasma protein P6 #formal_name Bos primigenius taurus #common_name cattle 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
                                                                             Gaps
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
 #length 148 #molecular-weight 16326 #checksum 5278
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                                         Length 148;
                                  Score 86; DB 2; Length 148;
Pred. No. 4.62e-06;
2; Mismatches 1; Indels
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##experimental_source seminal vesicle
TICATION #superfamily macrophage inflammatory protein
S glycoprotein
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9; Conservative 2; Mismattle
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##residues 1-99 ##label WEM
                                    88.7%;
                                            Best Local Similarity 75.0%;
Matches 9; Conservative
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##molecule_type mRNA
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#authors Yoshimura, T.; Yuhki, N.
#journal J. Immunol. (1991) 146:3483-3488
#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their #cross-references MUID:91225489
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The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
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#title Human monocyte chemotactic protein-3 (MCP-3): Molecular
Cloning of the cDNA and comparison with other chemokines.
                                                                                                                                                                                                                                                                                                                         monocyte chemoattractant protein-1 - rabbit
#formal_name Oryctolagus cuniculus #common_name domestic
                                                                                                                          Gaps
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28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change
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##crossrreferences 6B:M77440; NID:9165469; PID:9165470
CLASSIFICATION #superfamily macrophage inflammatory protein
#Hength 125 #molecular-weight 13776 #checksum 4498
#length 99 #molecular-weight 11114 #checksum 9401
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                                                         Score 84; DB 2; Length 99;
Pred. No. 1.26e-05;
2; Mismatches 1; Indels
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86.6%; Score 84; DB 2; Length 125;
Best Local Similarity 90.9%; Pred. No. 1.26e-05;
Matches 10; Conservative 0; Mismatches 1: Thank
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Pred. No. 1.26e-05;
...marches 1; Indels
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cross-references MUID:94375065
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                                                      Query Match
Best Local Similarity 75.0%;
Matches 9; Conservative
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Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J. Nucleic Acids Res. (1990) 18:23-34 Analysis of the rat JE gene promoter identifies an AP-1 binding site essential for basal expression but not for TPA
    Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, N.; Lupker, J.; Shire, D.; Ferrara, P.; Captt, D.; Vita, Submitted to the EMBL Data Library, March 1993
Molecular cloning of MCP-3: a human monocyte-derived monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the authors translated the codon GAA for residue 62 as Lys and GCT for residue 63 as Leu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem. Biophys. Res. Commun. (1991) 174:504-509
Molecular cloning of rat monocyte chemoattractant protein-1
(MCP-1) and its expression in rat spleen cells and tumor
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                                                                                                                                                                                                     ##cross-references EMBL:X71087; NID:9288396; PID:9288397 • This protein Induces proteinase secretion and chemotaxis by macrophages and monocytes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #length 109 #molecular-weight 12356 #checksum 1535
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predicted #label MAT\
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                                                                                                                                                                                                                                                                                                                                                                                        *superfamily macrophage inflammatory protein cytokine; glycoprotein; inflammation
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##cross-references GDB:138473; OMIM:158106
#map_position 17411-17412
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****ocidios 1-148 ##label TIM
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#cross-references MUD:91128376
#accession JN0128
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|larity 75.0%;
|Conservative
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Yoshimura, T.; Johnson, D.G.
J. Immunol. (1993) 151:6225-6236
cDNA cloning and expression of guinea pig neutrophil
attractant protein-1 (NAP-1): NAP-1 is highly conserved in
                                                                                                                                                                                                                                                                                                                                                                                                                                               Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
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                                                                                                                                                                                                                                                                                                             JC2417 #type complete
monocyte chemoattractant protein-2 precursor - pig
monocyte chemoattractant admestica #common_name domestic pig
#formal_name Sus scrote domestica #common_name domestic pig
24-ReD-1995 #sequence_revision 24-ReD-1995 #text_change
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                         #product immediate-early serum-responsive protein JE
#status predicted #label MAT
ith 148 #molecular-weight 16460 #checksum 4876
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Neutrophil attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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#length 101 #molecular-weight 11414 #checksum 2363
        #domain signal sequence #status predicted #label
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predicted #label MAT
ith 99 #molecular-weight 10903 #checksum 7556
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Pred. No. 9.08e-05;
2; Mismatches 2; Indels
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                                                                                                          Length 148;
                                                                                                                               Pred. No. 3.39e-05;
2; Mismatches 1
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Pred. No.
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#cross-references MUID:94065176
#accession 148148
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Similarity 66.7%;
8; Conservative
                                                                                                            84.5%;
Similarity 75.0%;
9; Conservative
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                                                                       #length 148
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| DICADPKKKWVQ 12
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#authors Yoshimura, T.
#journal J. Immunol. (1993) 150:5025-5032
#title CDNA cloning of guinea pig monocyte chemoattractant protein-1
and expression of the recombinant protein.
#cross-references MUID:93267104
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#title Cloning, genomic organization, and chromosomal localization of the Scya5 gene encoding the murine chemokine RANTES.
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monocyte chemoattractant cytokine RANTES precursor - mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #authors Schall, T.J.; Simpson, N.J.; Mak, J.Y.
#journal Eur. J. Immunol. (1992) 22:1477-1481
#title Molecular cloning and expression of the murine RANTES
Cytokine: structural and functional conservation between
#cross-references MUID:92289805
                                                        Gaps
                                                                                                                                                                                                            148147 #type complete
monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      **Status
##molecule_type mRNA
    Score 80; DB 2; Length 101;
Pred. No. 9.08e-05;
2; Mismatches 1; Indels
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#length 120 #molecular-weight 13741 #checks
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##cross-references GB:L04985; NID:9349820; PID:9349821
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##cross-references GB:S37648; NID:9250207; PID:9250208
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I48875; A46539; I48654; I56970
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Query Match
Best Local Similarity 75.0%;
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Best Local Similarity 66.7%;
Matches 8; Conservative
                                             9; Conservative
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##molecule_type mRNA
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#authors Neilson, E.G.; Krensky, A.
#journal Kidney Int. (1992) 41:220-225
#title Isolation and characterization of cDNA from renal tubular epithelium encoding murine Rantes: A small intercrine from the Scy superfamily.
                                                                                                                            #journal Noble, P.W.; Fisher, #journal Noble, P.W.; Fisher, #journal Noble. (2011. Biol. (1994) 14:2914-2925
#title Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of Murantes and crg-2.
                                                                                                    Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  *superfamily macrophage inflammatory protein chemotaxis; cytokine; immediate-early protein; inflammation
##experimental_source macrophage cell line PU5-1.8
##note sequence extracted from NCBI backbone (NCBIN:106768)
NCBIP:106770)
                                                                                                                                                                                                                                                                                      translation not shown; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ##residues 1-40, E',42-91 ##label NEI ##residues 1-40, E',42-91 ##label NEI ##cross-references GB:M77747; NID:9200649; PID:9200650 This chemoattractant for monocytes but not neutrophils is an immediate-early response protein to LPS stimulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #domain signal sequence #status predicted #label s
#product monocyte chemoattractant cytokine RANTES
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                                                                                                                                                                                                                                                                                                                            ##residues 1-91 ##label SHI
##cross-references EMBL:X70675; NID:9475205; PID:9475206
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Best Local Similarity 66.7%; Pred. No. 1.48e-04;
Matches 8; Conservative 3; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                              ##molecule_type DNA
##residues 1-91
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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 18:09:53 2000; MasPar time 5.11 Seconds 128.201 Million cell updates/sec

Tabular output not generated. Run on:

>US-09-150-813-73 (1-12) from US09150813.pep 86

1 KACLNPASPMVK 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremb19 Database:

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 1:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 23.076; Variance 25.745; scale 0.896 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	4.436-07	5.71e-06	2.01e-05	1.52e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4.76e-02	4./be-02	4.76e-02	8.36e-02	1.46e-01	1.46e-01	1.40e-U1
	Description	PERMEABILITY FACTOR 2	GRO.	MELANOMA GROWTH STIMUL	ALPHA-TUBULIN (FRAGMEN	ALPHA-TUBULIN ISOTYPE	ALPHA-4-TUBULIN (FRAGM	ALPHA TUBULIN (ALPHA-T	ALPHA-TUBULIN.	TUBULIN ALPHA CHAIN.	ALPHA-1 TUBULIN.	ALPHA-TUBULIN.	ALPHA-2-TUBULIN.	ALPHA-2 TUBULIN.	ALPHA-1-TUBULIN.	ALPHA-TUBULIN.	ċ	ALPHA-3-TUBULIN (FRAGM	TBA-2 PROTEIN.		1,4-ALPHA-GLUCAN BRANC
	QI	028724	046678	062764	P92126	026047	001944	013748	042271	076659	094985	026595	001942	094978	001941	027122	091855	001943	018688	017409	008131
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2.54e-01	4.38e-01	7.52e-01	7 520-01	100	7.52e-01	1.28e+00	2.17e+00	2 170+00	1 1	7.1/e+00	2.1/e+00	2.17e+00	2 176+00	000	7.1.E+00	2.17e+00	3.66e+00	00+099 6	000000	3.666+00	3.66e+00	3.66e+00			٠	6.11e+00	6 110+00	٠	٠	0.116100
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ALIGNMENTS

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STRAIN-NEW ZEALAND WHITE;
MEDLINE; 95129889.
JOHNSON M.C., GOODMAN R.B. II, KAJIKAWA O., WONG V.A., MONGOVIN S.M.,
                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OVIS ARIES (SHEEP).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                  MARTIN T.R.;
"Cloning of two rabbit GRO homologues and their expression in alveolar macrophages.";
GENE 15:137-388(1954).
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                 ORYČTOLAGUS CUNICULUS (RABBIT).
EUKRRYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                             Score 77; DB 6; Length 66;
Pred. No. 4.43e-07;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                            SEQUENCE 66 AA; 7102 MW; D4C4BC7D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                  PRT; 103 AA.
        66 AA
         PRT;
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Best Local Similarity 90.9%;
Matches 10; Conservative
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           PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                              2 ACLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                  43 ACLNPAAPMVK 53
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046678
046678;
LT 1
Q28724
Q28724;
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026047
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001944;
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ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; CAPRINAE; OVIS.
                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-ATCC 30860;
STRAIN-ATCC 30860;
MEDLINE, 97109817.
"Alpha-tubulin from early-diverging eukaryotic lineages and the evolution of the tubulin family.";
MOL. BIOL. EVOL. 13:1297-1305(1996).
EMBL. 066907; G1755092; ---
PERAM; PF00091; tubulin; 1.
NON_TER
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0
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PERISSODACTYLA; EQUIDAE, EQUUS.
                                                                                 Length 103;
                                                                                                  0; Indels
                                                                                                                                                                                        01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
MELANOMA GROWTH STIMULATORY ACTIVITY HOMOLOG (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 60; DB 5; Length 377;
Pred. No. 1.52e-02;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                              Length 59;
                                                                                                                                                                                                                                                                                              RIEDER S., CHECA-CORTES M.L., JOERG H., STRANZINGER G.;
SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, AF053497; G3033533;
                           YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U95814; G2735499; -
SEQUENCE 103 AA; 10820 MW; C34945B7 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE) 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE) ALPHA-TUBULIN (FRAGMENT).
                                                                             Score 73; DB 6; Le
Pred. No. 5.71e-06;
                                                                                                                                                                                                                                                                                                                                                        82.6%; Score 71; DB 6; L(72.7%; Pred. No. 2.01e-05;
                                                                                                1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; MICROSPORIDIA; NOSEMATIDAE; NOSEMA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377 AA; 41951 MW; 604D34D6 CRC32;
                                                                                                                                                                             59 AA.
                                                                                                                                                                                                                                                                                                                                    59 AA; 6344 MW; 0C5EA8CC CRC32;
                                                                                                                                                                                                                                                                                                                                                                             2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       377 AA.
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                                                                                                                                                                            PRT;
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                                                                              84.9%;
90.0%;
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8; Conservative
                                                                                                9; Conservative
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Best Local Similarity 72.7%;
Matches 8; Conservative
                                                                                                                                                                          PRELIMINARY;
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                                                                                                                                                                                                                                       EQUUS CABALLUS (HORSE).
                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                       :|||| :||||
2 ACLNPASPMVK 12
                                                                                                                 81 CLNPAAPMVK 90
                                                                                                                            3 CLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                           36 TCLNPEAPMVK 46
                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                        TISSUE=SKIN;
                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                            Query Match
                                                                                                                                                              LT 3
062764
062764;
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P92126
                                                                                             Matches
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EUKARYOTA: METAZOA; ECHINODERWATA; ECHINOZOA; ECHINOIDEA; EUECHINOIDEA;
ECHINACEA; ECHINOIDA; ECHINIDAE; PARACENTROTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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TISSUE-REGENERATING LIMB BUD;
MEDLINE; 97286098.
VARADARAJ K., KUMARI S.S., SKINNER D.M.;
Molecular characterization of four members of the alpha-tubulin gene family of the Bermuda land crab Gecarcinus lateralis.";
EMPL; U92648; G2098757;
EMBL; U92648; G2098757;
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GIANGUZZA F., CASANO C., RAGUSA M.;
"Alpha-tubulin marker gene of neural territory of sea urchin embryos
detected by whole-mount in situ hybridization.";
INT. J. DEV. BIOL. 39.477483(1995).
EMBL. S80438; 61245776;
PPRM: PF00091; tubulin; 1.
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
ALPHA-4-TUBULIN (FRAGMENT).
ECKARCINUS LATERALIS.
EUKARYOTA, METAZOA; ARTHROPODA; CRUSTACEA; MALACOSTRACA;
EDWALACOSTRACA; EUCARIDA; DECAPODA; PLEOCYEMATA; BRACHYURA;
ERACHYRHYNCHA; GRAPSOIDEA; GECARCINIDAE; GECARCINUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match 67.4%; Score 58; DB 5; Length 331; Local Similarity 58.3%; Pred. No. 4.76e-02; nes 7; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67.4%; Score 58; DB 5; Length 359; 58.3%; Pred. No. 4.76e-02; Pative 4; Mismatches 1; Indels
                                                                                                                                                                                           01-NOY-1996 (TREMBLREL. 01, CREATED)
01-NOY-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
ALPHA-TUBULIN ISOTYPE 2 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     331 AA; 36955 MW; 1CCB86D1 CRC32;
                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
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Conservative
                                                                                                                                                   PRELIMINARY;
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PARACENTROTUS LIVIDUS
265 ACFNPESQMVK 275
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                                            2 ACLNPASPMVK 12
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1 KACLNPASPMVK 12
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EUKARYOTA; METAZOA; ARTHROPODA; CRUSTACEA; BRANCHIOPODA; ANOSTRACA;
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02, LAST SEQ
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Best Local Similarity 58.3%;
Matches 7; Conservative
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Best Local Similarity 58.3%;
Matches 7; Conservative
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                    ARTEMIIDAE; ARTEMIA.
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026595;
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BRACHTDANIO RERLO (ZEBRAFISH) (ZEBRA DANIO).

BRACHTDANIO RERLO (ZEBRAFISH) (ZEBRATA; ACTINOPTERYGII; NEOPTERYGII; EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII; TELEOSTEI; DSTRRIOPHYSI; CYPRINIFORMES; CYPRINOIDEA; CYPRINIDAE; RASBORINAE; DANIO.
                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                             MEDLINE; 98126445.
DODE C., WEIL D., LEVILLIERS J., CROZET F., CHAIB H., LEVI-ACOBAS F., GUILFORD P., PETIT C.;
GUILFORD P., PETIT C.;
Sequence characterization of a newly identified human alpha-tubulin gene (TUBA2).
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Pred. No. 4.76e-02;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                      Score 58; DB 4; Length 449;
Pred. No. 4.76e-02;
                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                     BONALDO M., SU L., LAWTON L.N., SOARES M.B.;
SUBMITTED (JUL-1993) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF005392; G2843123; -.
EMBL; L11645; G306451; -.
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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BORMANN P., ZUMSTEG V.M., ROTH L.W.A., REINHARD E.;
J. NEDROSCI. RES. 0:0-0(1997).

MELL; AF029250; G2599500; -.

PFAM; PFF00091; tubulin; 1.

SEQUENCE 449 Aa; 49953 MW; EOBEF20C CRC32;
                                      01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                449 AA; 49828 MW; 85360775 CRC32;
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                 449 AA.
                                                                          ALPHA TUBULIN (ALPHA-TUBULIN) (FRAGMENT).
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01-NOV-1998 (TREMBLREL: 08,
01-NOV-1998 (TREMBLREL: 08,
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Similarity 58.3%;
7; Conservative
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Local Similarity 58.3%;
hes 7; Conservative
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                   PRELIMINARY;
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                                                                                                     HOMO SAPIENS (HUMAN).
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                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 98126445.
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076659
076659;
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SCHISTOSOMA MANSONI (BLOOD FLUKE); TREMATODA; DIGENEA; STRIGEIDIDA;
SCHISTOSOMATOIDEA; SCHISTOSOMATIDAE; SCHISTOSOMA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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FEDOROV A.N., KORNEEV S.A., QUINN Z.A., BLACKSHAW S.E., DAVIES J.A.;
FEDOROV A.N., KORNEEV S.A., QUINN Z.A., BLACKSHAW S.E., DAVIES J.A.;
ENDALTITED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.

EMBL, 167675; G1527170; -.

EMBL, 167675; G1527191; -.

EMBL, FFOOD91; tubulin; 1.

SEQUENCE 451 AA, 50123 MW; 831B07C4 CRC32;
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HIRUDO MEDICINALIS (MEDICINAL LEECH).
EUKARYOTA; METAZOA; ANNELIDA; CLITELLATA; HIRUDINIDA; HIRUDINEA.
ARYNCHOBDELLIDA; HIRUDINIFORMES; HIRUDINIDAE; HIRUDO.
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WEBSTER P.J., SETA K.A., CHUNG S.C., MANSOUR T.E.;
MCDNA encoding an alpha-tubulin from Schistosoma mansoni.";
MOL. BIOCHEM. PARSITOL. 51:169-170(1992).
EMBL; M80214; G161072; -...
PRAM; PF00091; tubulin; 1.
SEQUENCE 451 AA; 50007 MW; B089AlDF CRC32;
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SEQUENCE FROM N.A. LIANG P., MACRAE T.H.; ZHENG Y., ROY P., LIANG P., MACRAE T.H.; Cloning and sequencing of an alpha-tubulin cDNA from Artemia franciscana.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 58; DB 5; Length 451;
Pred. No. 4.76e-02;
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                                                                                                                                                                                                                            Query Match
Best Local Similarity 58.3%; Pred. No. 4.76e-02;
Matches 7; Conservative 4; Mismatches 1; Indels
                                                                                                            CONTITED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AF078670; G3348122; ... SEQUENCE 450 AA; 49938 MW; 8B76A064 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
ALPHA-TUBULIN.
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08, LAST ANNOTATION UPDATE)
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"Molecular characterization of four members of the alpha-tubulin gene family of the Bermuda land crab Gecarcinus lateralis.";
J. EXP. 2001. 278:63-77(1997).
EMBL; U92646; G2098753;
PPAM; PF00091; tubulin; 1.
SEQUENCE 451 AA; 50342 MW; 17EB1096 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEOGROY A.N., KORNEEV S.A., QUINN Z.A., BLACKSHAW S.E., DAVIES J.A.; SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U67676; G1537172; ---
EMBL; U67678; G1532193; ---
PRAM; PF00091; tubulin; 1.
SEQUENCE 451 AA; 50148 MW; 34321A1D CRC32;
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EUKARYOTA; METAZOA; ANNELIDA; CLITELLATA; HIRUDINIDA; HIRUDINEA;
ARYNCHOBDELLIDA; HIRUDINIFORMES; HIRUDINIDAE; HIRUDO.
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                                                                                                                                                                                                                                                                                                                                 GECARCINUS LATERALIS,
EUKARYOTA; METAZOA; ARTHROPODA; CRUSTACEA; MALACOSTRACA;
EUMALACOSTRACA; EUCARIDA; DECAPODA; PLEOCYEMATA; BRACHYURA;
BRACHYRHYNCHA; GRAPSOIDEA; GECARCINIDAE; GECARCINUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 58; DB 5; Length 451;
Pred. No. 4.76e-02;
4; Mismatches 1; Indels
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Pred. No. 4.76e-02;
4; Mismatches 1; Indels
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
ALPHA-2-TUBULIN.
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01-010-1997 (TREMBLREL. 04, CREATED)
01-ULL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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ALPHA-2 TUBULIN.
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01-FEB-1997 (TREMBLREL. 02, LAST SEQ
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TISSUE-REGENERATING LIMB BUD;
MEDLINE; 97288098.
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Local Similarity 58.3%;
les 7; Conservative
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Local Similarity 58.3%;
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293 NACFEPANOMVK 304
                                                     1 KACLNPASPMVK 12
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1 KACLNPASPMVK 12
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GECARCINUS LATERALIS.
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1 KACLNPASPMVK 12
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                                                      SEQUENCE FROM N.A.

FISSUE-REGENERATING LIMB BUD;

MEDLINE; 97288098.

VARADARA K., KUMARI S.S., SKINNER D.M.;

"Molecular characterization of four members of the alpha-tubulin gene family of the Bermuda land crab Gecarcinus lateralis.";

J. EXP. ZOOL. 278:63-77(1997).

EMBL: U92645; G2098751;

PFAM; PF00091; tubulin; 1.

PFAM; PRO0091; tubulin; 1.
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Sequence analysis of translationally controlled maternal mRNAs from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                    0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 URECHIS CAUPO (INNKEEPER WORW) (SPOONWORM).
EUKARYOTA; METAZOA; ECHIURA; XENOPNEUSTA; URECHIDAE; URECHIS
EUKARYOTA; METAZOA; ARTHROPODA; CRUSTACEA; MALACOSTRACA;
EUWALACOSTRACA; EUCARIDA; DECAPODA; PLEGCYEMATA; BRACHYURA;
BRACHYRHYNCHA; GRAPSOIDEA; GECARCINIDAE; GECARCINUS.
                                                                                                                                                                                                                        Query Match

Query Match

Best Local Similarity 58.3%; Pred. No. 4.76e-02;

Matches 7; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67.4%; Score 58; DB 5; Length 451; 7; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCEENTHAL E.;
SUBMITTED (JUN-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U30467; G942596; ...
EMBL; DF00091; tubulin; 1.
SEQUENCE 451 AA; 50089 MW; FESEFFF3 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
ALPHA-TUBULIN.
                                                                                                                                                                                                                                                                                                                                                                                     PRT; 451 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEV. GENET. 14:485-491(1993).
                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                      293 NACFEPANQMVK 304
                                                                                                                                                                                                                                                                                                                  1 KACLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    293 NACFEPANOMVK 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 KACLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 94155469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Urechis caupo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ROSENTHAL E.;
                                                                                                                                                                                                                                                                                                                                                             LT 15
Q27122
Q27122;
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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 18:15:31 2000; MasPar time 5.08 Seconds 128.999 Million cell updates/sec Tabular output not generated.

Run on:

>US-09-150-813-74 (1-12) from US09150813.pep 86 1 KACLNPASPMVQ 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremb19 Database:

11:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 11:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 22.969; Variance 26.140; scale 0.879 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	2 4.94e-05	N.		σ,	ω ,		8.43e-01	œ			Д		•	•	2.40e+00	2.40e+00	2.40e+00	2.40e+00	2.40e+00	2.40e+00
Description	PERMEABILITY FACTOR	GRO.	MELANOMA GROWTH STIMUL	1,4-ALPHA-GLUCAN BRANC	ALPHA-TUBULIN (FRAGMEN	GAG PRO POL POLYPROTEI	PR110.	PR160.	HYPOTHETICAL 33.9 KD	ZEAXANTHIN GLUCOSYL TR	HYPOTHETICAL 30.0 KD	ALPHA-TUBULIN ISOTYPE	ALPHA-4-TUBULIN (FRAGM	ALPHA TUBULIN (ALPHA-T	ALPHA-TUBULIN.	TUBULIN ALPHA CHAIN.	ALPHA-1-TUBULIN.	ALPHA-2-TUBULIN.	ALPHA-1 TUBULIN.	ALPHA-TUBULIN.
ID	028724	046678	062764	008131	P92126	083391	092804	056220	013713	P72650	065707	026047	001944	013748	042271	076659	001941	001942	094985	026595
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Query Match Length	99	103	59	852	377	591	859	1754	307	419	268	331	359	449	449	450	451	451	451	451
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Score	7.0	99	64	57	53	53	5.5	3,00	52	52	100	5.1	1.5	51	15	1.5	15	5.1		51
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2.40e+00	2.40e+00	2.40e+00	2.40e+00	2.40e+00	2.40e+00	2 400+00		4 .00e+00	4.00e+00	4.00e+00	4.00e+00	4.00e+00	4.00e+00	4.00e+00	4.00e+00	6.63e+00	620+00	00-20-0	6.63e+00	6.63e+00	6.63e+00	6.63e+00	6.63e+00	6.63e+00	1.09e+01	1.09e+01
ALPHA-TUBULIN.	ALPHA-2 TUBULIN.	SUP35 (FRAGMENT).	PATCHED HOMOLOG (PTC).	PATCHED HOMOLOGUE.			PAICHED.	ORF 62.	DNA-BINDING PROTEIN (F	ALPHA-TUBULIN (FRAGMEN	ALPHA-3-TUBULIN (FRAGM	CIS4.	DNA-BINDING PROTEIN.	F15B9.7 PROTEIN.	NEUROFIBROMIN.	CATCHEOME DASO (FRAGM		PICI (FRAGMENT).	TBA-2 PROTEIN.	ALPHA-1 TUBULIN.	GLYCOPROTEIN E.	CUS8.	HELICASE.	POLYKETIDE SYNTHASE MO	1,4-ALPHA-GLUCAN BRANC	NON-STRUCTURAL PROTEIN
027122	094978	091855	013463	061115	2000	00000	013635	P88953	043568	P92120	001943	014544	040451	019482	50750	2000	CTAGTO	042335	018688	017409	091334	041526	065855	030764	004864	066913
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EUPHYLLOPHYTES; SPERMATOPHYTA, MAGNOLIOPHYTA; EUDICOTYLEDONS; ROSIDAE;
EUPHORBIALES; EUPHORBIACEAE; MANIHOT.
                                                                                                                                                     Gaps
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; CAPRINAE; OVIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOY-1996 (TREMBLREL. 01, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
1,4-ALPHA-GLUCAN BRANCHING ENZYME PRECURSOR (EC 2.4.1.18)
(1,4-ALPHA-GLUCAN BRANCHING ENZYME R-3) (STARCH BRANCHING ENZYME)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SALEHUZAMAN S.N., JACOBSEN E., VISSER R.G.;
"Cloning, partial sequencing and expression of a cDNA coding for branching enzyme in cassava.";
PLANT MOL. BIOL. 20:809-819(1992).
-:- CATALYTIC ACTIVITY: FORMATION OF 1,6-GLUCOSIDIC LINKAGES OF
                                                                                                                                                     ő
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PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                         Length 103;
                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                01-AUG-1998 (TREMBLREE, 07, LAST SEÓUENCE UPDATE)
01-AUG-1998 (TREMBLREE, 07, LAST ANNOTATION UPDATE)
MELANOMA GROWTH STIMULATORY ACTIVITY HOMOLOG (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-SKIN;
RIEDER S., CHECA-CORTES M.L., JOERG H., STRANZINGER G.;
SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF053497; G3033533; -.
NON TER 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 59;
                                         YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL, U95814; G2735499; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=CV. M.COL 22; TISSUE-TUBEROUIS ROOTS;
SALEHUZZAMAN SNIM., JACOBSEN E., VISSER R.G.F.;
SUBMITTED (JAN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                   Score 66; DB 6; LA Pred. No. 5.51e-04;
                                                                               103 AA; 10820 MW; C34945B7 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 64; DB 6; L
Pred. No. 1.80e-03;
                                                                                                                                                 1; Mismatches
                                                                                                                                                                                                                                                               59 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59 AA; 6344 MW; 0C5EA8CC CRC32;
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                                                                                                                                                                                                                                                               PRT;
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                                                                                                                Local Similarity 70.0%; les 7; Conservative
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                                                                                                                                              8; Conservative
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                                                                                                                                                                                                                                                                                                                                                         EQUUS CABALLUS (HORSE)
                             SEQUENCE FROM N.A.
                                                                                                                                                                       81 CLNPAAPMV 89
                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                       3 CLNPASPMV 11
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062764;
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VIRUSES; RETROID VIRUSES; RETROVIRIDAE; MAMMALIAN TYPE B RETROVIRUSES.
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
          -!- SUBUNIT: MONOMER.
-!- PATHWAY: THIRD SIEP IN STARCH BIOSYNTHESIS.
-!- SUBCELLULAR LOCATION: AMYLOPEAST.
-!- SUBCELLULAR LOCATION: AMYLOPEAST.
-!- SIMILARITY: BELONGS TO FAMILY 13 OF GLYCOSYL HYDROLASES, ALSO KNOWN AS THE ALPHA-AMYLASE FAMILY.
EMBL; X7012; E96414; --
EMBL; X7012; E96414; --
EMBL; X69714; G313295; --
PFAM; PF00128; alpha-amylase; 1.
PFAM; PF0118; Annes; Sbel; 2.
TRANSIT PEPTIDE: TRANSFERASE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REELING P.7., DOCITTLE W.F.;
*Alpha-tubulin from early-diverging eukaryotic lineages and the evolution of the tubulin family.";
MOL. BIOL. EVOL. 13.1297-1305(1996).
EMBL. U66907; 61755092; --
PFAM, PF00091; tubulin; 1.
NON_TER 377 377
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                                                                                                                                                                TRANSIT 1 74 POTENTIAL.
CHAIN 75 852 1,4-ALPHA-GLUCAN BRANCHING ENZYME.
SEQUENCE 852 AA; 96684 MW; 7764CE83 CRC32;
                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                        Score 57; DB 10; Length 852;
Pred. No. 9.70e-02;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 61.6%; Score 53; DB 5; Length 377; Local Similarity 70.0%; Pred. No. 8.43e-01; es 7; Conservative 1; Mismatches 2; Indels
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LAST ANNOTATION UPDATE)
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LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; MICROSPORIDIA; NOSEMATIDAE; NOSEMA
                                                                                                                                                                                                                                                                                                                                                                377 AA.
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01-MAY-1997 (TREMBLREL. 03, LAST SEQI
01-NOV-1998 (TREMBLREL. 08, LAST ANN
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ilarity 58.3%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                               ALPHA-TUBULIN (FRAGMENT).
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                                                                                                                                                                                                                                                                            572 MSCLTDASPMVD 583
                                                                                                                                                                                                                                                                                                     1 KACLNPASPMVQ 12
                                                                                                                                                     STARCH BIOSYNTHESIS
                                                                                                                                                                                                                                     Best Local Similarity
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MEDLINE; 97109817.
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GLYCOGEN.
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01-JAN-1999
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SEQUENCE
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P92126
P92126;
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Q83391;
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MOUSE MANMARY TUMOR VIRUS.
VIRUSES; RETROID VIRUSES; RETROVIRIDAE; MANMALIAN TYPE B RETROVIRUSES.
                                                                                                                                               P8.
P27 CA.
                                                                                                                                                                P14 NC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 50.0%;
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Best Local Similarity 41.7%;
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495
744
1754
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| KACLNPASPMVQ 12
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228 25
252 49
496 74
744 175
1754 AA;
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                                                                                                                                                                                                                                                                                                                                                                      VIRUSES; RETROID VIRUSES; RETROVIRIDAE; MAMMALIAN TYPE B RETROVIRUSES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          PETROPOULOS C.J.;
"Appendix 2: Retroviral taxonomy, protein structure, sequences, and genetic maps.". (EDS.); RETROVIRUSES:757-757;
(IN) COFFIN J.M. (EDS.); RETROVIRUSES:757-757;
COLD SPRING HARBOR LABORATORY PRESS, NY, USA (1997).
                                                        MISHIO M., XU L., SASAKI M., HAGA S., OKUMOTO M., MORI N.,
SARKAR N.H., ACHA-ORBEA H., ENAMI J., IMAI S.;
SARKAR N.H., ACHA-ORBEA H., ENAMI J., IMAI S.;
"Complete Nucleotide Sequence of mouse mammary tumor virus from JYG
chinese wild mice: absence of bacterial insertion sequences in the
Choned viral gag gene."
BREAST CANCER 1:89-94 (1994).
EMBL; D16249; D104281; -.
PFAM, PP000098; Zf-CCHC; 1
PFAM, PP00007; gag_P24; 1.
                                                                                                                                                                                                       Gaps
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          tumor viurs: two frameshift suppression events are required for
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Pred. No. 8.43e-01;
7; Mismatches 0; Indels
                                                                                                                                                                                  Score 53; DB 14; Length 591;
Pred. No. 8.43e-01;
7; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAPPEY C.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF033807; G2801454; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                          CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95277 MW; C40C054D CRC32;
                                                                                                                                                                591 AA; 66268 MW; 176E719A CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT; 1754 AA.
                                                                                                                                                                                                                                                                                        859 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P8.
P27 CA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PP21 XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P14 NC
                                                                                                                                                                                                                                                                                         PRT;
                      anslation of gag and pol.";
VIROL. 61:480-490(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06,
06,
07,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61.6%;
Similarity 41.7%;
5; Conservative
                                                                                                                                                                                                                                                                                                             01-NOV-1998 (TREMBLREL. 08, 01-NOV-1998 (TREMBLREL. 08, 01-NOV-1998 (TREMBLREL. 08,
                                                                                                                                                                                     / Match 61.6%;
Local Similarity 41.7%;
hes 5; Conservative
                                                                                                                                                                                                                                                                                                                                                               MOUSE MAMMARY TUMOR VIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1998 (TREMBLREL.
01-JUN-1998 (TREMBLREL.
01-AUG-1998 (TREMBLREL.
                                                                                                                                                                                                                                                                                          PRELIMINARY;
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252
495
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                                                                                                                                                                                                                                                  1 KACLNPASPMVQ 12
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                                                       SEQUENCE FROM N.A.
                        translation of
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                                                                                                                                                          POLYPROTEIN.
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056220
056220;
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                                                                                                                                                                                                                                                                                                      092804;
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013713
013713;
01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
HYPOTHETICAL 33.9 KD ZINC FINGER PROTEIN C14C4.06C IN CHROMOSOME I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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-!- SUBCELLULAR LOCATION: NUCLEAR (POTENTIAL).
EMBL; Z98596; E334264; -.
HYPOTHETICAL PROTEIN; NUCLEAR PROTEIN; DNA-BINDING; ZINC-FINGER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
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                                                                                                                                                                                                                                                                                                                                                                                            Score 53; DB 14; Length 1754;
Pred. No. 8.43e-01;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
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BACTERIA; CYANOBACIERIA; CHROCCCCALES; SYNECHOCYSTIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 10
P72650 PRELIMINARY; PRT; 419 AA.
P72650; CTEMBLREL. 02, CREATED)
01-FEB-1997 (TREMBLREL. 02, LAST SEQUENCE UPDATE)
01-PEB-1997 (TREMBLREL. 02, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                     CHAPPEY C.; SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AF033807; G2801455; ... CHAIN 99 194 PP21 XX.
PETROPOULOS C.J.;
(IN) COFFIN J.M. (EDS.); RETROVIRUSES:757-757;
COLD SPRING HARBOR LABORATORY PRESS, NY, USA (1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA, FUNGI; ASCOMYCOTA; ARCHIASCOMYCETES; SCHIZOSACCHAROMYCETALES; SCHIZOSACCHAROMYCETACEAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60.5%; Score 52; DB 3; L. 50.0%; Pred. No. 1.43e+00;
                                                                                                                                                                                                                                                                                                                                                 196983 MW; 9BA7E7E1 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZN FING 184 199 C3H-TYPE.
SEQUENCE 307 AA; 33929 MW; 7B5BE6D8 CRC32;
                                                                                                                                                                                                                                                                                                                      P30DU-P13PR-RT-IN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    7; Mismatches
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                                                                                        STRAIN-PCC6803;
MEDLINE: 97061201
KANEKO T., SATO S., KOTANI H., TANAKA A., ASAMIZU E., NAKAMURA Y.,
MIYAJIMA N., HIROSAWA M., SUGIURA M., SASAMOTO S., KIMURA T.,
HOSOUCHI T., MATSUNO A., MURAKI A., NAKAZAKI N., NARUO K., OKUMURA S.,
SHIMPO S., TAKEUCHI C., WADA T., WATANABE A., YAMADA M., YASUDA M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).
EUKARYOTA, VIRIDIPLANTAE; STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS; ROSIDAE;
CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                                "Sequence analysis of the genome of the unicellular cyanobacterium Synchocystis sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions."; EMBL; D90899; D1017385; ...
EMBL; D90899; D1017385; ...
                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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BEVAN M., VAN DER SCHUEREN J., CHUANG Y-J., VOET M., ROBBEN J.,
VOLCKAERT G., BANCROFT I., MEWES H.W., MAYER K.F.X., SCHUELLER C.;
SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                       Score 52; DB 2; Length 419;
Pred. No. 1.43e+00;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 51; DB 10; Length 268
Pred. No. 2.40e+00;
3; Mismatches 2; Indels
                                              SUBMITTED (JUN-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EU ARABIDOPSIS SEQUENCING PROJECT;
SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AL022580; E1287627;
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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026047.
01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1998 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST SHOUTATION UPDATE)
ALPHA-TUBULIN ISOTYPE 2 (FRAGMENT).
                                                                                                                                                                                                                                                                                                       419 AA; 45330 MW; 4208CF23 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        268 AA; 29999 MW; DE86BECE CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268 AA.
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01-AUG-1998 (TREMBLREL. 07, LAST SEQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-AUG-1998 (TREMBLREL. 07, LA UN-AUG-1998 (TREMBLREL. 07, LA HYPOTHETICAL 30.0 KD PROTEIN.
                                                                                                                                                                                                                                                                                                                                     / Match 60.5%;
Local Similarity 77.8%;
Nes 7; Conservative
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Local Similarity 50.0%;
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SEQUENCE FROM N.A.
                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                               331 CLNNAVPMV 339
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                 STRAIN-PCC6803;
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065707
065707;
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PARACENTROTUS LIVIDUS (COMMON SEA URCHIN).
EUKARYOTA: METAZOA; ECHINODERMATA; ECHINOZOA; ECHINOIDEA; EUECHINOIDEA;
ECHINACEA; ECHINOIDA; ECHINIDAE; PARACENTROTUS.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
TISSUE-REGERERATING LIMB BUD;
MEDLINE; 97288098.
VARADARAJ Y. KUMARI S.S., SKINNER D.M.;
Molecular characterization of four members of the alpha-tubulin gene family of the Bermuda land crab Gecarcinus lateralis.";
EXP. ZOOL. 278:63-77(1997).
EMBL; U92648; G2098757; ---
FPAM; PRO0091; tubulin; 1.
                                                                      MEDLINE; 96015119.
GIANGUZAR F., CASANO C., RAGUSA M.;
GIANGUZAR F., CASANO C., RAGUSA M.;
"Alpha-tubulin marker gene of neural territory of sea urchin embryos
detected by whole-mount in situ hybridization.";
INT. J. DEV. BIOL. 39:477-483(1995).
EMBL. S80438; 61245776;
1.
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MEDLINE; 98126445.
DODE C., WEIL D., LEVILLIERS J., CROZET F., CHAIB H., LEVI-ACOBAS F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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0
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EUMALACOSTRACA; EUCARIDA; DECAPODA; PLEOCYEMATA; BRACHYURA;
BRACHYRHYNCHA; GRAPSOIDEA; GECARCINIDAE; GECARCINUS.
                                                                                                                                                                                                                                y Match 59.3%; Score 51; DB 5; Length 331; Local Similarity 54.5%; Pred. No. 2.40e+00; hes 6; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59.3%; Score 51; DB 5; Length 359; 54.5%; Pred. No. 2.40e+00; vative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                       36955 MW; 1CCB86D1 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      359 AA; 39873 MW; 862D6969 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                     359 AA.
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                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1997 (TREMBLREL. 04, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
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GECARCINUS LATERALIS.
                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1997 (TREMBLREL. 04, 01-NOV-1998 (TREMBLREL. 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATARRINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   larity 54.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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                                                                                                                                                                                              331
                                                                                                                                                                                                                                                                                          172 NACFEPANOMV 182
                                                                                                                                                                                                         331 AA;
                                                                                                                                                                                                                                                                                                             201 NACFEPANQMV 211
                                                        SEQUENCE FROM N.A.
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NON_TER
SEQUENCE
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SEQUENCE
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001944
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Q13748;
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BRACHYDANIO RERIO (ZEBRAFISH) (ZEBRA DANIO).
BRACHYDANIO RERIO (ZEBRAFISH) (ZEBRA DANIO).
EUKARYOTA, METAZOA, CHORDATA, VERTEBRATA, ACTINOPTERYGII; BUTELEOSTEI; BUTELEOSTEI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; RASBORINAE; DANIO.
GUILFORD P., PETIT C.; "Sequence characterization of a newly identified human alpha-tubulin gene (TUBA2)."; GENOMICS 47:125-130(1998).
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Best Local Similarity 54.5%; Pred. No. 2.40e+00;
Matches 6; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                    Query Match 59.3%; Score 51; DB 4; Length 449; Best Local Similarity 54.5%; Pred. No. 2.40e+00; Matches 6; Conservative 4; Mismatches 1; Indels
                                                                  [2]
SEQUENCE OF 352-449 FROM N.A.
SEQUENCE OF 352-449 FROM N.A., SOARES M.B.;
SUBMITTED (JUL-1993) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF005392; G2843123; -.
EMBL; L11645; G306451; -.
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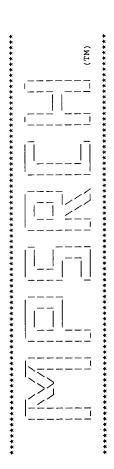
BORMANN P., ZUNSTEG V.M., ROTH L.W.A., REINHARD E.;

BORMANN P., ZUNSTEG V.M., ROTH L.W.A., REINHARD E.;

BARDIS, FRO28250; G2599500; -.

PFAM; PF00091; tubulin; 1.

SEQUENCE 449 AA; 49953 MW; E0BEF20C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                     042271;
01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                      SEQUENCE 449 AA; 49828 MW; 85360775 CRC32;
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042271
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protein - protein database search, using Smith-Waterman algorithm

MPsrch_pp

Fri Feb 4 16:58:12 2000; MasPar time 3.49 Seconds 60.986 Million cell updates/sec

Run on:

labular output not generated

(1-10) from US09150813.pep 84 >US-09-150-813-7 Description: Perfect Score:

1 CADPKQKWVQ 10 Sedneuce:

PAM 150 Gap 15 Scoring table:

170751 seqs, 21266608 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

a-geneseq35 Database:

| jpart1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part11 18:part18 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 32:part32 33:part33 34:part34 35:part35 36:part36 37:part37 38:part38

Mean 17.907; Variance 61.592; scale 0.291 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

No.	Ξ	7	1		ᅼ	1	1	1	7	7	7	ĭ	7	7	7	71
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Pred.	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.00	1.06e-01	1.06e-01	1.0
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& Query Match	100	100.0	100	100	100	100	100	100	100	100.0	100	100	100	100	100	100.
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ALIGNMENTS

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Disclosure: Page 5: 77pp: English.

The present sequence represents an analogue, MCP-1 (10-76), of monocyte chemotatractent protein-1 (MCP-1). The analogue, which lacks the chemotatractent protein-1 (MCP-1). The analogue, which lacks the chemotal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 creeptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding diseases. The analogue competes more effectively with MCP-1 for binding providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND. N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent Monocyte chemoattractant, protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis; W13598 standard; peptide; 66 AA. 07-NOV-1997 (first entry) Homo sapiens. CA2152141-A. 20-DEC-1996. 19-JUN-1995; 152141. Gong J, Lewis I; WPI; 97-165844/16. (LEWI/) LEWIS I. lung disease. W13598; RESULT

ö Gaps ö Score 84; DB 24; Length 66; Pred. No. 1.06e-01; 0; Mismatches 0; Indels Query Match
Best Local Similarity 100.0%;
Matches 10; Conservative

Sat Feb

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Disclosure; Page 5, 27pp; English.

Disclosure; Page 5, 27pp; English.

Disclosure; Page 5, 27pp; English.

The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 as t lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases. MCP-1 has been implicated in allergic and chronic inflammatory diseases. The analogue competes more effectively with MCP-1 for binding diseases. The analogue competes more effectively with MCP-1 for binding with 75:1 for prior art mutant versions of MCP-1 e.g. preferably with 75:1 for prior art mutant 7ND.
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wPI: 97-165844/16.
N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) -
lacks MCP-1 activity and inhibits receptor binding, useful as
anti-inflammatory agent
Claim 7: Page 5: 27pp; English.
The present sequence represents an analogue, MCP-1 (9-76), of monocyte
chemoattractant protein-1 (MCP-1). The analogue, which lacks the
                                                                                                                                                                Monocyte chemoattractant protein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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Truncated monocyte chemoattractant protein-1; inhibitor:
receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
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Pred. No. 1.06e-01;
0; Mismatches 0; Indels
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W13599 standard; peptide; 67 AA.
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Local Similarity 100.0%;
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(LEWI/) LEWIS I.
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
                   42 cadpkqkwvq 51
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WPI; 97-165844/16.
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CA2152141-A.
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CA2152141-A.
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Notice that they inhibit the monocyte chemo-attractant activity of apable of inhibiting the monocyte chemo-attractant activity of the monocyte chemo-attractant activity of apable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis.

For an analysis of an activity of endogenous monocyte chemoattractant activity of endogenous monocyte chemoattractant activity of endogenous concern they inhibit the monocyte chemoattractant activity of endogenous concern they inhibit the monocyte chemoattractant activity of endogenous concern they inhibit the monocyte chemoattractant activity of endogenous concern they inhibit the monocyte chemoattractant activity of endogenous concerns they inhibit the monocyte chemoattractant activity of endogenous concerns concerns and collider in a preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed Monocular and Cellular Biology, vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory alseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably with MCP-1 for binding with 75:1 for prior art mutant 7ND.
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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Pred. No. 1.06e-01;
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Pred. No. 1.06e-01;
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12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
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W13596 standard; peptide; 69 AA.
W13596;
07-NOV-1997 (first entry)
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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 18:03:33 2000; MasPar time 5.07 Seconds 129.098 Million cell updates/sec MPsrch_pp

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Run on:

>US-09-150-813-72 (1-12) from US09150813.pep 82 Description: Perfect Score:

1 KACLNPASPIVK 12 Sequence:

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremb19 Database:

1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 1:sp_archeate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus

Mean 23.018; Variance 24.711; scale 0.932 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	5.90e-05	7.29e-04	2.49e-03	8.81e-02	4.836-01	1.45e+00	1.406+00	1.45e+00	1.45e+00	1.45e+00	1.456+00	1.45e+00	1.45e+00	1.45e+0C	2.50e+0C	2.50e+0C	2.50e+00	2.50e+00	4.25e+00	4.25e+U(
Description	PERMEABILITY FACTOR 2	GRO.	MELANOMA GROWTH STIMUL	SUP35 (FRAGMENT).	HYPOTHETICAL 11.8 KD P	ALPHA-TUBULIN (FRAGMEN	DNA-BINDING PROTEIN (F	DNA-BINDING PROTEIN.	MYELOBLAST KIAA0240 (F	PATCHED HOMOLOG (PTC).		PATCHED PROTEIN.	PATCHED.		HYPOTHETICAL 33.9 KD Z	ORF11.	1,4-ALPHA-GLUCAN BRANC	3-HYDROXY-3-METHYLGLUT		PTC1 (FRAGMENT).	
ID	028724	046678	062764	091855	083165	P92126	043568	040451	092514	013463	061115	090693	013635	019482	013713	036366	004864	074425	073912	042335	
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Score	68	9 9	62	26	53	51	51	51	51	51	51	51	51	51	50	50	20	50	4	67	•
Result No.	-	10	m	4	· ro	ø	7	· 00	6		11	12		7 7		9	17	18	10	200	à

4.25e+00 4.25e+00 4.25e+00 4.25e+00	4.25e+00	4.25e+00	4.25e+00		•	4.256+00	4 . 25e+00	4.25e+00	4.25e+00	4.25e+00	•	٠	7.19e+00	•	7.19e+00	7.19e+00	7.19e+00	7.19e+00	1.21e+01	1.216+01
HYPOTHETICAL 30.0 KD PALPHA-TUBULIN ISOTYPE ALPHA-4-TUBULIN (FRAGM ALPHA-T		TUBULIN ALPHA CHAIN: ALPHA-1 TUBULIN.	ı	ALPHA-2 TUBULIN.	ALPHA-1-TUBULIN.	ALPHA-TUBULIN.	ALPHA-TUBULIN.	GAG PRO POL POLYPROTE1	PR110.	PR160.		FRAG	HYPOTHETICAL 47.9 KD P	ION.	HYPOTHETICAL 63.5 KD P	LOPROPAN		CYCLOSPORIN SYNTHETASE	ã.	GLYCOPROTEIN E.
065707 026047 001944	042271	076659	001942	094978	001941	026595	027122	083391	092804	056220	077753	001943	005591	046447	084354	046035	084657	009164	55	091334
01.0	13.	n n	'n	5	Ŋ	S	'n	14	14	14	φ	S	~	~	7	7	~	m	~	14
3331	4	450	S	451	451	451	451	591	ഗ	1754	119	443	458	501	266	603		15281	264	522
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50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	A	50	n (T	CD.	σ,	σħ.	σ	59	59	5	28	20	58	58	28	22	20	28	57	57
4 4 4 4 0 0 0 0	4 4	4 4	4 4 V Q	49	49	49	49	49	49	49	4 8	4 8	48	4	4	4 8	4 8	48	47	47
222	25	26	77	29	30	31	32	6.60	34	, L	3.6	3,0	30	6 6	0.4	41	4.2	4.3	44	45

ALIGNMENTS

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                                                                                                                                                                                           JOHNSON M.C., GOODMAN R.B. II, KAJIKAWA O., WONG V.A., MONGOVIN S.M.,
                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                              MARTIN T.R.;
"Cloning of two rabbit GRO homologues and their expression in alveolar macrophages.";
GENE 151.337-338(1994).
EMBL: 128933: G455433.
EMBL: 128933: G455443.
EMBL: 128931: G50471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OVIS ARIES (SHEEP).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                              Score 68; DB 6; Length 66;
Pred. No. 5.90e-05;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
                               01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
PERMEABILITY FACTOR 2 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                    SEQUENCE 66 AA; 7102 MW; D4C4BC7D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103 AA.
          66 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
          PRT;
                                                                                                                                                                                                                                                                                                                                                      Query Match 82.9%;
Best Local Similarity 81.8%;
                                                                                                                                                                                                                                                                                                                                                     82.98;
                                                                                                                                                                                                                                                                                                                                                                               9; Conservative
                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
MEDLINE; 95129889.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                          43 ACLNPAAPMVK 53
                                                                                                                                                                                                                                                                                                                                                                                                                          2
046678
046678;
LT 1
Q28724
Q28724;
                                                                                                                                                                                                                                                                                                                                                                                  Matches
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ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; CAPRINAE; OVIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             XENOPUS LAEVIS (AFRICAN CLAWED FROG).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; AMPHIBIA; BATRACHIA; ANURA;
MESOBATRACHIA; PIPOIDEA; PIPIDAE; XENOPODINAE; XENOPUS.
                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 88329727.
KUSHNIROV V.V., TER-AVANESYAN M.D., TELCKOV M.V., SURGUCHOV A.P.,
SMIRNOV V.N., INNE-VECHTOMOV S.G.;
"Nucleotide sequence of the SUP2 (SUP35) gene of Saccharomyces
                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                   EUKARYOTA; METAŻOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.

TISSUB-UNFERFILIZED EGGS;
MEDLINE; 95393983.

BHOURAYLEA G., FROLOVA L.Y., LE GOFF X., LE GUELLEC R.,
INGE-VECHTOMOV S.G., KISSELEV L.L., PHILIPPE M.;
"Termination of translation in eukaryotes is governed by two
                                                                                                     Length 103;
                                                                                                                           0; Indels
                                                                                                                                                                                                                                          01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
MELANOMA GROWTH STIMULATORY ACTIVITY HOMOLOG (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                               Length 59;
                       SEQUENCE FROM N.A.
YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U95814; G2735499;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                   Score 64; DB 6; Le
Pred. No. 7.29e-04;
2; Mismatches 0;
                                                                      103 AA; 10820 MW; C34945B7 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 2.49e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 62; DB 6;
                                                                                                                                                                                                                          59 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  614 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C1155

C1-NOV-1996 (TREMBLREL. 01, CREATED)

01-NOV-1996 (TREMBLREL. 01, LAST SEQ

01-NOV-1998 (TREMBLREL. 08, LAST SEQ

SUP35 (FRAGMENT)
                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                  78.0%;
80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        75.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 63.6%;
les 7; Conservative
                                                                                                           Local Similarity 80.0%;
nes 8; Conservative
                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
TISSUE=UNFERTILIZED EGGS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                        (HORSE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : | | | | : | : | | | 2 ACLNPASPIVK 12
                                                                                                                                               81 CLNPAAPMVK 90
                                                                                                                                                            3 CLNPASPIVK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36 TCLNPEAPMVK 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENE 66:45-54(1988).
                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FRAGMENT).
                                                                                                                                                                                                                                                                                                        EQUUS CABALLUS
                                                                      SEQUENCE
                                                                                                  Query Match
                                                                                                                                                                                                          LT 3
062764
062764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                                                                                      Matches
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PRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G.,
DODSON R., GWININ M., HICKEY E.K., CLAYTON R., KETCHUM K.A.,
SODERGREN E., HARDHAM J.M., HOWELL J.K., CHIDAMBARAM M., UTIERBACK T.,
MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., FUJII C., GARLAND S.,
HATCH B., HORST K., ROBERTS K., WAITHEY L., WEIDMAN J., SMITH H.O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                            FRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G., DODSON R., GWINN M., HICKEY E.K., CLAYTON R., KETCHUM K.A., SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALEBERG S., PETERSON J., KHALAK H., RICHARNSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T., MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., FUJII C., GARLAND S., VENIER J.C., WEIDMAN J., SMITH H.O.,
                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
interacting polypeptide chain release factors, eRF1 and eRF3."; EMBO 0.14:4065-4072(1995).
EMBL: L37045; G976219; -.
PFAM: PF00009; GTP_ETU; 1.
                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Complete Genome Sequence of Treponema pallidum, the Syphilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                  Length 614;
                                                                                               Score 56; DB 13; Length 614;
Pred. No. 8.81e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64.6%; Score 53; DB 2; Length 115; 58.3%; Pred. No. 4.83e-01; Ative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                  TREPONEMA PALLIDUM.
BACTERIA; SPIROCHAETALES; SPIROCHAETACEAE; TREPONEMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AE001198; G3322395; -.
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                       01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                          SEQUENCE 614 AA; 67919 MW; 672740BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115 AA; 11763 MW; 4616268A CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUKARYOTA; MICROSPORIDIA; NOSEMATIDAE; NOSEMA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               377 AA
                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                      01-NOV-1998 (TREMBLREL. 08, L. 01-NOV-1998 (TREMBLREL. 08, L. HYPOTHETICAL 11.8 KD PROTEIN.
                                                                                                                       Best Local Similarity 45.5%;
Matches 5; Conservative
                                                                                                             68.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-1997 (TREMBLREL. 03, 01-MAY-1997 (TREMBLREL. 03, 01-NOV-1998 (TREMBLREL. 08, ALPHA-TUBULIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCIENCE 281:375-388(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58.3%;
                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                    20 PCLTPSAPLIK 30
                                                                                                                                                                                     :|| |::|::|
2 ACLNPASPIVK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35 RACLVPASHFVR 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KACLNPASPIVK 12
                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 98332770.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NOSEMA LOCUSTAE
                                                                                                            Query Match
                                                                                                                                                                                                                                             LT 5
083165
083165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LT 6
P92126
P92126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATUB
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MENDEL; 16183; NICta;2451;mn16183.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LT 10
Q13463
Q13463;
                                                                                                                                      092514
092514
                                           Query Match
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                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUKARYOTA, VIRIDIPLANTAE: STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES: SPERMATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS;
ASTERIDAE: SOLANANAE; SOLANALES; SOLANACEAE; NICOTIANA.
                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                 EUKARYOTA; VIRIDIPLANTAE: STREPTOPHYTA; EMBRYOPHYTA; TRACHEOPHYTA;
EUPHYLLOPHYTES; SPERNATOPHYTA; MAGNOLIOPHYTA; EUDICOTYLEDONS;
ASTERIDAE; SOLANANAE; SOLANALES; SOLANACEAE; NICOTIANA.
                                  KEELING P.J., DOOLITTLE W.F.;
"Alpha-tubulin from early-diverging eukaryotic lineages and the evolution of the tubulin family.";
Myor. BIS. EVOL. 13:1297-1305(1996).
EMBL: U66007; G1755092; -...
PPRAM. PF00091; tubulin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 380;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 51; DB 10; Length 380;
Pred. No. 1.45e+00;
"**ma*rches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=XANTHI; TISSUE-STEM;
LAIBLE G., NATT E., SEGUIN A., DOERNER P.W., LAMB C.J.;
LAIBLE G., NATT E., SEGUIN A., DOERNER P.W., LAMB C.J.;
SUBMITTED (FEB-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U06712; G555655; --
FRAM; PF00538; linker_histone; 1.
                                                                                                                                         62.2%; Score 51; DB 5; Length 377; 63.6%; Pred. No. 1.45e+00;
                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                        01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1
380 AA; 39388 MW; 60583FC0 CRC32;
                                                                                                                         377 AA; 41951 MW; 604D34D6 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            546 AA
                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                     380 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NICOTIANA TABACUM (COMMON TOBACCO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-CV. SRI; TISSUB-LEAF;
TJADEN G., CORUZZI G.M.;
FLAUT CELL 1:107-118(1994).
EMBL; L26113; G456124; -
MENDEL; 16184; NICLa;2451;mn16184.
DNA-BINDING.
                                                                                                                                                                                                                                                                                                                             NICOTIANA TABACUM (COMMON TOBACCO)
                                                                                                                                                                                                                                                                                    01-NOV-1996 (TREMBLREL. 01, LAS:
01-JAN-1999 (TREMBLREL. 09, LAS:
DNA-BINDING PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62.2%;
Local Similarity 54.5%;
Les 6; Conservative
                                                                                                                                                         Local Similarity 63.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                   7; Conservative
                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                  377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 348 KPCLNAESPAI 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA-BINDING PROTEIN.
                                                                                                                                                                                        265 ACFNPESQMVK 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KACLNPASPIV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                       2 ACLNPASPIVK 12
                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
           SEQUENCE FROM N.A. STRAIN-ATCC 30860; MEDLINE; 97109817.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                    NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                 Query Match
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Q40451
                                                                                                                                                                                                                                             LT 7
Q43568
                                                                                                        NON_TER
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CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
TISSUB-BONE MARROW;
MAGASE T., SEXI N., ISHIKAWA K., OHIRA M., KAWARABAYASI Y., OHARA O.,
TANARA A., KOTANI H., MIYAJIMA N., NOMURA N.;
TANARA A., KOTANI H., MIYAJIMA N., NOMURA N.;
TRANARA A., FOTANI H., MIYAJIMA SEQUENCES OF UNIGENTIFIED HUMAN GENES. VI.
The coding sequences of 80 new genes (KIAA0201-KIAA0280) deduced by
analysis of cDNa clones from cell line KG-1 and brain.";
DNA RES. 3:321-329(1996).
EMBL: DB7077; p1013936; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDITE: 96218118.
HARN H., CHRISTIANSEN J., WICKING C., ZAPHIROPOLOUS P.G.,
CHIDARBARAM A., GERRARD B., VORECHOVSKY I., BALE A.E., TOFTGARD R.,
CHIDARBARGHT B.,
"A mammalian patched homolog is expressed in target tissues of sonic
hedgehog and maps to a region associated with developmental
abnormalities."
J. BIOL. CHEM. 271:12125-12128(1996).
EMBL: U43148: G1335864; ---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 51; DB 4; Length 983;
Pred. No. 1.45e+00;
1; Mismatches 2; Indels
                                                                      Length 546;
                                                              Match 62.2%; Score 51; DB 10; Length 546 Local Similarity 54.5%; Pred. No. 1.45e+00; es 6; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01, CREATED)
01, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-1997 (TREMBLREL. 02, CREATED)
01-FEB-1997 (TREMBLREL. 02, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               983 AA; 105052 MW; 7C466D59 CRC32;
                   546 AA; 57188 MW; 98DD1AF9 CRC32;
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                                                                                                                                                                                                                                                                                                                                       983 AA.
                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MYELOBLAST KIAA0240 (FRAGMENT).
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Best Local Similarity 70.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1996 (TREMBLREL.
01-NOV-1996 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
PATCHED HOMOLOG (PTC).
                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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                                                                                                                                                                                    514 KPCLNAESPAI 524
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| KACLNPASPIV 11
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DNA-BINDING.
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Score 51;
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01-NOV-1998 (TREMBLREL. 08,
01-AUG-1998 (TREMBLREL. 07,
                                                                                                                                                                                                                                                                                                                                                                     62.2%;
                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
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Best Local Similarity
                                                                                                                                              SEQUENCE FROM N.A.
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                                                                                                                                                                   TISSUE=LUNG;
                                                                                                                                                                                                                                                                            syndrome.
                                       PATCHED.
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                                                                                                                                                                                                                                                                MUS WUSCULUS (MOUSE),
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                                                                                                                                                                                                                                                                                                                                         GOODRICH L.V., JOHNSON R.L., MILENKOVIC L., MCMAHON J.A., SCOTT M.P., "Conservation of the hedgehog/patched signaling pathway from files to mice: induction of a mouse patched gene by Hedgehog."; GENES DEV. 10:301-312(196).

EMBL; U46155; G1181885; EMBL; MG155; G1181885; MGD; MGI:105373; PTCH.
                 Gaps
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CONSErvation in hedgehog signaling: induction of a chicken patched
homolog by Sonic hedgehog in the developing limb.";
DEVELOPMENT 122.1225-1233(1996).
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 51; DB 11; Length 1434;
Pred. No. 1.45e+00;
2; Mismatches 1; Indels (
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Pred. No. 1.45e+00.
               Indels
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2; Mismatches 1; Indels
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LAST ANNOTATION UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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013635;
01-809-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
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       2; Mismatches
                                                                                                                                                  PRT; 1434 AA.
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ilarity 66.7%;
Conservative
 6; Conservative
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                                                                                                                                                PRELIMINARY;
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01-NOV-1996 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                      143 RPCLNPADP 151
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                                                                    1 KACLNPASP 9
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Q61115
Q61115;
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*** SEQUENCE FROM N.A.

*** SEQUENCE FROM N.A.

*** WILSON R., ANDERSON K., BAYNES C., BERKS M.,

*** MILSON R., AUSCOUGH R., ANDERSON K., BAYNES C., BERKS M.,

*** MILSON R., BURTON J., CONNELL M., COPERY T., COOPER J., COLLSON A.,

*** RAXTON M., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L.,

*** ACRATON M., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L.,

*** ADONES M., KERSHAM J., LAISTER M., JOHNSTON L.,

*** ADONES M., KERSHAM J., LLOYD C., MCMURRAY A., MORTIMORE B., O'CALLAGRAN M.,

*** ADONES M., SMITH A., SONNHAMER E., STRADEN R., SULSTON J.,

*** SMALDON N., SMITH A., SONNHAMER E., STRADEN R., SULSTON J.,

*** ATTERRY WIEG J., THOMAS R., VAUDIN M., VAUGHAN K., WATERSTON R.,

*** THERRY WIEG J., THOMAS R., WILKINSON-SPROMI J., WOHLDMAN P.;

*** THERRY WIEG J., MC., WILKINSON-SPROMI J., WOHLDMAN P.;

*** THERRY WIEG J., MC., WILKINSON-SPROMI J., WOHLDMAN P.;

*** THERRY WIEG J., MC., WILKINSON-SPROMI J., WOHLDMAN P.;

*** THERRY WIEG J., WILKINSON-SPROMI J., WOHLDMAN WIEG 
                                                                                                                                                   HOMO SAPIENS (HUMAN).
EUKARYOTĀ; METAZOĀ; CHORDATĀ; VERTEBRATĀ; MAMMALIĀ; EUTHERIĀ; PRIMĀTES;
CATARRHINI; HOMINIDĀE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'Human homolog of patched, a candidate gene for the basal cell nevus
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EMBL; 278013; E1350097; JOINED.
EMBL; 278013; E1345595; --
EMBL; 278018; E1345595; JOINED.
PROSITE; PS00232; CADHERIN; 6.
CELL APHESION; GLYCOPROTEIN; TRANSMEMBRANE; CALCIUM-BINDING; REPEAT.
SEQUENCE 2610 AA; 290075 WW; 1D187623 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 96247324.

JOHNSON R.L., ROTHMAN A.L., XIE J., GOODRICH L.V., BARE J.W.,
BONTEAS J.M., QUINN A.G., MYERS R.M., COX D.R., EPSTEIN E.H. JR.,
SCOTT M.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PERCY C.;
SUBMITTED (AUG-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN (BY SIMILARITY).
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01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
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LAST ANNOTATION UPDATE)
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EMBL; U59464; G1381236; -.
SEQUENCE 1447 AA; 160559 MW; 6BD592C2 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.45e+00;
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DB 5; Length 2610;

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01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
HYPOTHETICAL 33.9 KD ZINC FINGER PROTEIN C14C4.06C IN CHROMOSOME I. SPAC14C4.06C.
SCHTZOSACCHAROMYCES POMBE (FISSION YEAST).
EUKARYOTE: FUNGI: ASCOMYCOTA; ARCHIASCOMYCETES; SCHTZOSACCHAROMYCETALES; SCHIZOSACCHAROMYCETACEAE; SCHIZOSACCHAROMYCETACEAE;
                     Gaps
                                                                                                                                                                                                                                                                                                                                                                      [1]
STRAIN-972;
DEVLIN K., CHURCHER C.M., BARRELL B.G., RAJANDREAM M.A., WOOD V.;
STRAIN-972;
DEVLIN K., CHURCHER C.M., BARRELL B.G., RAJANDREAM M.A., WOOD V.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
- SUBGLILULAR LOCATION: NUCLEAR (POTENTIAL).
EMBL; Z98596; E334264; O.:
HYPOTHETICAL PROTEIN; NUCLEAR PROTEIN; DNA-BINDING; ZINC-FINGER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
61.0%; Score 50; DB 3; Length 307;
Best Local Similarity 54.5%; Pred. No. 2.50e+00;
Matches 6; Conservative 3; Mismatches 2; Indels
Best Local Similarity 50.0%; Pred. No. 1.45e+00;
Matches 5; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     METAL-BINDING.
ZN_FING 184 199 C3H-TYPE.
SEQUENCE 307 AA; 33929 MW; 7B5BE6D8 CRC32;
                                                                                                                                                                  307 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search completed: Fri Feb \,4\,\,18:04:29\,\,2000 Job time : 56 secs.
                                                                                                                                                                    PRT;
                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                257 KPCLNPACRFI 267
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| KACLNPASPIV 11
                                                           59 PCLHPGQPII 68
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2 ACLNPASPIV 11
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88888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the as in lacks MCP-1 biological activity and inhibits binding to a MCP-1 creeptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases. MCP-1 has been implicated in allergic and chronic inflammatory diseases. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding C mCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis claim 3; Page 11; 22pp; English (MCP-1) derivatives are mutated such monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such monocyte chemoattractant activity of endogenous MCP-1, provided that the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Landon and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 37-Asp by Ala; and/or (4) deletion of amino acidis. 2-8 The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
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                      Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                          N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 84; DB 24; Length 69;
Pred. No. 1.06e-01;
0; Mismatches 0; Indels
      Monocyte chemoattractant protein analogue MCP-1 (8-75).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   anti-inflammatory agent
Claim 5; Page 5; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.0%;
hes 10; Conserved
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12-NOV-1993; US-152301.
                                                                                                                                                                                                                                              19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rollins B, Zhang YJ;
WPI; 95-215051/28.
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                                                                                                                                                                                                                                                                                                                                                Gong J, Lewis I;
WPI; 97-165844/16.
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                                                                                                                                  lung disease.
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Matches
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Drug containing a bovine protein homologous to human MCP-1 - for treating inflammation, tumours, thrombosis, and immune reactions, a los for diagnosis

23 Claim 1, Page 3; 6pp; German

25 Claim 1, Page 3; 6pp; German

26 Claim 1, Page 3; 6pp; German

27 Executed with a polyclaid appropriate was used to prepare a cDNA in the expression vector lambda gtil. 1.5 x 10(5) GDNA clones were considered with a polyclanal anti-P6 antiserum of monospecific and munoglobulin G and Six positives were identified. The insert of a immunoglobulin G and Six positives were identified. The insert of a cuitable cDNA clone, pH42, was cloned into pUG18 and sequenced. Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. Peptide Showing 100% and the central region showing 89% homology.
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                                                                                                                                                                                                      Gaps
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28-03N-1993 (first entry)
Sequence of bovine P6 protein.
Monocyte chemostractant; bovine P6-derivative; thrombosis; tumour;
inflammation therapy.
and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989. The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein; antisense; inhibition;
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Human; monocyte chemoattractant protein; antisense; inhibition
mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
vascular restenosis.
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Pred. No. 1.06e-01;
0; Mismatches 0; Indels
                                                                                                                              Score 84; DB 14; Length /v;
Pred. No. 1.06e-01;
'''cmatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JUL-1991; 125251.
31-JUL-1991; DE-125251.
31-JUL-1991: DE-125251.
GCHA-) SCHAPRE & BRUEMMER GMBH & CO KG.
Gramm W. Lins E;
WPI; 92-293438/36.
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W09374 standard; Protein; 76 AA.
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Best Local Similarity 100.0%;
Matches 10; Conservative
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                                                                                                                                                Query Match
Best Local Similarity 100.0%;
Matches 10; Conservative
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22-OCT-1992; 965678.
22-OCT-1992; US-965678.
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                                                                                                                                                                                                                                                                      52 cadpkqkwvq 61
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                                                                                                76 AA;
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W40175;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of morphogenous MCP-1 and can be used to treat restenosis claim 6; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous CPP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate, (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino derivative based on the parent protein disclosed in Rollins, Molecular Cand Callular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients Squence 76 Aa;
                                                                      Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) -
useful for therapy or diagnosis of restenosis, etc.
Useful for therapy or diagnosis of restenosis, etc.
Disclosure: Column 13-14; 16pp; English.

This is the amino acid sequence of the human monocyte chemoattractant
protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent
stimulator of monocyte chemotaxis and is produced by injured vascular
smooth cells thus attracting monocytes. The general infiltrate
the injured area and release growth factor. This causes proliferation of
the vascular smooth cells resulting in restenosis. The gene sequence can
be used to generate antisense sequences e.g. 148093-7, which can be used
to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or
macrophages, or smooth muscle cells, esp. in order to prevent vascular
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'note= "Asp in the native sequence is replaced by Ala"
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Pred. No. 1.06e-01;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                   0; Indels
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(DAND ) DANA FARBER CANCER INST INC.
27-MAY-1994; US-250958.
(UNI) DNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter RM;
WPI: 96-505405/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R87677 standard; protein; 76 AA.
                                                                                                                                                                                                                                                                                                                  Match 100.0%;
Local Similarity 100.0%;
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Local Similarity 100.0%;
les 10; Conservative
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WPI; 95-215051/28.
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12-NOV-1993; US-1523
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                                                                                                                                                                                                                                                                                                                                                                           52 cadpkqkwvq 61
                                                                                                                                                                                                                                                                                  76 AA;
                                                            N-PSDB; T48092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disulfide_bond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (3-Ala) MCP-1
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                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                  Query Match
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Disclosure; page 3; 46pp; English.
Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from leukocytes and has mol. wt. 8400. Used to treat infections and neoplasms. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Macrophage chemoattractant peptide designated GDCF-2.
Macrophage chemoattractant peptide MCP; MCP-1; treatment; neoplasm;
Monocyte chemoattractant peptide; MCP; MCP-1; treatment; neoplasm;
Monocyte chemotactic response; inflammation;
monocyte infiltration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                         New peptide with specific chemotactic activity for monocytes - isolated from glioma or leucocyte cells, useful for treating infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a monocyte chemoattractant peptide (MCP) designated GDCF-2. MCPs can be isolated from human glioma cell line U-105MG (e.g. present sequence) and peripheral blood monouclear leukocytes. MCPs are used for the treatment of neoplasms and infections in humans. Short peptides derived from MCPs can be screened to identify chance that can bind to the monocyte receptor without stimulating a chance to response. These are potentially useful for treating a inflammation associated with monocyte infiltration.
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31-JAN-1989; US-3304234.
(USSH) US-BET HEALTH & HUMAN SERVICES.
Appella E, Leonard EJ, Robinson EA, Yoshimura T;
WPI; 98-129909/12.
Peptide with chemotactic activity for monocytes - from human monocytes or glioma cells, useful for treating infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 84; DB 1; Length 76;
Pred. No. 1.06e-01;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                          20-JUL-1989.
31-JAN-1989; 03-0423.
31-JAN-1989; US-304234.
31-JAN-1989; US-304234.
XOSHIMURA T; Robinson E; Appella E; Leonard E.
WPI; 89-263501/36.
                                                                                         cell line U-105MG.
                                                                                                                                                                                                        /note= "pyroglutamic acid"
                                       P90292,
17-JAN-1990 (first entry)
Peptide from human glioma cell line U-10:
Glioma, leucocyte; chemotaxis; neoplasms.
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                                                                                                                                                      Location/Qualifiers
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JT 10
P90292 standard; peptide; 76 AA.
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W40175 standard; Protein; 76 AA.
                                                                                                                                                                                           /label= OTHER
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Best Local Similarity 100.0%;
Matches 10; Conservative
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06-JUN-1995; 466280.
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Length 76;

Score 84; DB 30; I Pred. No. 1.06e-01;

Query Match 100.0%; Best Local Similarity 100.0%;

Query Match

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28-APR-1994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are Human monocyte chemo-attractant activity of capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis and activity of endogenous MCP-1 and can be used to treat restenosis activity of endogenous processes that the definish the monocyte chemoattractant activity of endogenous that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the defivative has not been modified by the MCP-1 worth they inhibit the monocyte chemoattractant activity of endogenous MCP-1 activity in substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg activity by phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino by phe; (3) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg activity based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients cundergoing coronary artery angioplasty.
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Disclosure; Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has
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11..36
12..52
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                                                                                                                                                                                                                                                                                     (24-Arg) MCP-1.
monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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          0; Mismatches
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(DAND ) DANA FARBER CANCER INST INC.
Rollins B, Zhang YJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R87680 standard; protein; 76 AA.
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13-SEP-1994; JO1512.
13-SEP-1993; JP-227385.
               10; Conservative
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WPI; 95-215051/28.
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07-NOV-1994; U12874.
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WPI: 95-131181/17.
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                                                             52 cadpkqkwvq 61
                                                                                                           1 CADPKOKWVO 10
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potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy. Sequence 76\ AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for e.g. treating bacterial infectious diseases.
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Disclosure; Page 5; 42pp; English.
The sequences given in R53398-99 represent sense and antisense
monocyte chemotactic protein-1 (MCP-1) respectively. These
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E.coli strains
Claim 1; Page 48 + Page 36; 56pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Plasmid; monocyte chemotactic factor; MCF; translation; termination; terminator; initiation; ribosome binding site;
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pred. No. 1.06e-01;
0; Mismatches 0)
                                                                                                                                   Score 84; DB 14;
Pred. No. 1.06e-01;
                                                                                                                                                                                     0; Mismatches
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(DAIN ) DAINIPPON PHARM CO LTD.
FUKUI T, MATSUO N, Yamada M, Yamagishi J;
WPI: 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RBS; promoter; tryptophan; repressor. Synthetic.
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Best Local Similarity 100.0%;
Matches 10; Conservative
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Best Local Similarity 100.0%;
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22-OCT-1992; US-965678.
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27-APR-1992; J00550.
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oligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis. Radiolabelled antisense MCP-1 compounds may be constructed using high energy alpha or beta emitting isotopes rather than the gamma emitters cutomarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that proliferation of vascular cells is inhibited.
                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                  Score 84; DB 10; Length 76;
Pred. No. 1.06e-01;
0; Mismatches 0; Indels
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Best Local Similarity 100.0%;
Matches 10; Conservative
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Search completed: Fri Feb 4 16:58:32 2000 Job time: 20 secs.

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and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989. The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty. Sequence 76 AA;

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The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1), acts as an antagonist of MCP-1 of MCP-1, acts as an antagonist of MCP-1 ceptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into cinflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding CMCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
                                       rruncated monocyte chemoatrractant protein 1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent
Monocyte chemoattractant protein analogue MCP-1 (8-76).
                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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WPI; 97-165844/16.
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0; Gaps Query Match
100.0%; Score 84; DB 24; Length 69;
Best Local Similarity 100.0%; Pred. No. 1.06e-01;
Matches 10; Conservative 0; Mismatches 0; Indels 45 cadpkqkwvq 54 1 CADPKQKWVQ 10 셤 ö

Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are thuman monocyte chemo-attractant activity of capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis claim 3; Page 11; 22pp: English (MCP-1) derivatives are mutated such Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such Monocyte chemoattractant chemoattractant of officed by the substitution of 28-Tyr by Leu and/or 30-Arg by val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 34-Rp by Ala; and/or (4) deletion of anino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular 'note- "Tyr in the native sequence is replaced by Asp" monocyte chemoattractant protein; MCP-1; mutant; restenosis; 12-NOV-1993, US-152301. (DAND) DANA FARBER CANCER INST INC. Rollins B, Zhang YJ; WPI; 95-215051/28 Location/Qualifiers T 6 R87675 standard; protein; 76 AA. 21-FEB-1996 (first entry) 07-NOV-1994; U12874. disulfide_bond (28-ASP) MCP-1. disulfide_bond modified_site Homo sapiens. W09513295-A1. angioplasty. 18-MAY-1995

05-NOV-1996. 22-OCT-1992; 965678. 22-OCT-1992; US-965678.

US5571713-A.

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Poly(A+) RNA from buil seminal vesicles was used to prepare a cDNA in the expression vector lambda gill. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific immunoglobulin g and six positives were identified. The insert of a sultable cDNA clone, pH42, was cloned into pUC18 and sequenced. PH42 encodes the 11,114 Da precursor of P6. It is called Monocyte Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology.
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Sequence of bovine P6 protein.
Monocyte chemoattractant; bovine P6-derivative; thrombosis; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drug containing a bovine protein homologous to human MCP-1 - for treating inflammation, tumours, thrombosis, and immune reactions, also for diagnosis
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Score 84; DB 14; Length 76;
Pred. No. 1.06e-01;
0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-SEP-1992.
31-JUL-1991; 125251.
31-JUL-1991; DE-125251.
(SCHA-) SCHAPER & BRUENMER GMBH & CO KG.
Gramm W. Lins E;
WPI; 92-293438/36.
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W09374 standard; Protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                       R26580 standard; Protein; 76 AA.
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Best Local Similarity 100.0%;
Matches 10; Conservative
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                 Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 10; Conservative
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DE4125251-C.
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and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989. The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
Sequence 76 AA;

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12..52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
Monocyte chemoattractant protein analogue MCP-1 (8-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                        N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 84; DB 24; Length 69;
Pred. No. 1.06e-01;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .T 6
R87675 standard; protein; 76 AA.
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Best Local Similarity 100.0%;
Matches 10; Conservative
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                                                                                                                                                                                    19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-NOV-1994; U12874.
12-NOV-1993; US-1523
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                                                                                                                                                                                                                                                                                     Lewis I;
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                                                                                                            lung disease.
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Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA in Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA in the expression vector lambda gill. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific lamnoglobulin G and 3ix positives were identified. The insert of a suitable cDNA clone, pH42, was cloned into pUCI8 and sequenced. PH42 encodes the 11,114 Da precursor of P6. It is called Monocyte Chemoatractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                          28-JAN-1993 (first entry)
Sequence of bovine P6 protein.
Monocyte chemoattractant; bovine P6-derivative; thrombosis; tumour;
                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Drug containing a bovine protein homologous to human MCP-1 - for treating inflammation, tumours, thrombosis, and immune reactions, also for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Monocyte chemotactic profein 1.
Human; monocyte chemoattractant protein; antisense; inhibition;
mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
vascular restenosis.
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Pred. No. 1.06e-01;
0; Mismatches 0; Indels
Score 84; DB 14; Length 76;
Pred. No. 1.06e-01;
0; Mismatches 0; Indels
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Best Local Similarity 100.0%;
Matches 10; Conservative
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21-MAR-1997 (first entry)
      Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 10; Conservative
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22-OCT-1992; 965678.
22-OCT-1992; US-965678.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-SEP-1992.
31-JUL-1991; 125251.
31-JUL-1991; DE-125251.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation therapy.
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WPI; 92-293438/36.
                                                                                                                                          52 cadpkqkwvq 61
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Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis
Claim 3: Page 11: 22pp; English.
Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Arg by Ala; and/or (4) deletion of al Arg by Phe; (3) substitution of 3-Arg by Ala; and/or (4) deletion of anno acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular

Rollins B, Zhang YJ; WPI; 95-215051/28.

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(MZ)	

Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

MasPar time 2.48 Seconds 114.038 Million cell updates/sec Fri Feb 4 16:59:22 2000; Run on:

Tabular output not generated.

>US-09-150-813-7 (1-10) from US09150813.pep Description: Perfect Score:

1 CADPKQKWVQ 10 Sequence:

Scoring table:

77977 seqs, 28268293 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

1:swissprot swiss-prot37 Database:

Mean 24.651; Variance 31.983; scale 0.771 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Pred. No.	5.10e-07	5.10e-07	5.10e-07	5.10e-07	5.10e-07	8.92e-07	4.71e-06	2.43e-05	2.07e-04	2.07e-04	2.07e-04	2.07e-04	2.07e-04	2.07e-04	5.95e-04	5.95e-04	1.00e-03						
Description	MONOCYTE CHEMOTACTIC P	EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO						
ΙD	MCP1_HUMAN	MCPA_BOVIN	MCP2_BOVIN	MCP1_CANFA	MCP1_RABIT	MCP1_PIG	MCP4 HUMAN	EOTA_CAVPO	EOTA HUMAN	EOTA RAT	EOTA MOUSE	MCP3_HUMAN	MCP2_PIG	MCP1_CAVPO	MI1A RAT	IL8 SHEEP	IL8_RABIT	IL8 CANFA	IL8_PIG	MCP5_MOUSE	MIP4_HUMAN	MCP2_HUMAN	IL8 BOVIN
DB	-	Н	-	Н	Н	-	Н	-	1	Н	Н	Н	Н	-	П	٦	Н	Н	Н	Н	٦	٦	1
* Query Match Length	66	66	66	101	125	66	86	96	97	97	97	66	66	120	92	101	101	101	103	104	89	66	101
% Query Match	100.0	100.0	100.0	100.0	100.0	98.8	95.2	91.7	91.7	91.7	91.7	91.7	91.7	91.7	86.9	86.9	86.9	86.9	86.9	86.9	84.5	84.5	83.3
Score	84	84	84	84	84	83	80	77	77	77	77	77	77	77	73	73	73	73	73	73	71	71	7.0
Result No.		7	m	4	'n	φ	7	- α	0	10	11	12	13	14	15	16	17	8	10	20	21	22	23

[5] SEQUENCE FROM N.A.

1.00e-03	1.68e-03	1.68e-03	4.70e-03	4.70e-03	4.70e-03	4.70e-03	4.70e-03	7.81e-03	7.81e-03	7.81e-03	1.29e-02	1.29e-02	2.13e - 02	2.13e-02	2.13e - 02	2.13e - 02	3.50e-02	3.50e-02	3.50e-02	5.71e-02	9.30e-02
_	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	STROMAL CELL-DERIVED F	STROMAL CELL-DERIVED F	STROMAL CELL-DERIVED F	MACROPHAGE INFLAMMATOR	INTERLEUKIN-8 PRECURSO	T-CELL SPECIFIC RANTES	MACROPHAGE INFLAMMATOR	T-CELL SPECIFIC RANTES	CHEMOKINE CC-1 PRECURS	CHEMOKINE CC-3 PRECURS	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR	TONSILLAR LYMPHOCYTE L	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	LYMPHOTACTIN PRECURSOR	LYMPHOTACTIN PRECURSOR
IL8_CAVPO	MCPB_BOVIN	MCP1_MOUSE	SDF1_MOUSE	SDF1_FELCA	SDF1_HUMAN	MI3A_HUMAN	IL8_HUMAN	SISD MOUSE	MI1A MOUSE	SISD_RAT	CCC1_HUMAN	CCC3_HUMAN	MI1B_HUMAN	MI1A HUMAN	MI10_HUMAN	MCP3 MOUSE	IL8 CERTO		MCP1 RAT	LTN RAT	LTN_MOUSE
Н	Н	Н	Н	Н	Н	7	Н	٦	Н	7	Н	Н	Н	Н	Н	Н	Н	Н	Н	Ч	٦
101	74	148	83	93	63	96	66	91	92	92	93	109	92	92	93	97	101	101	148	114	114
83.3	82.1	82.1	79.8	79.8	79.8	79.8	79.8	78.6	78.6	78.6	77.4	77.4	76.2	76.2	76.2	76.2	75.0	75.0	75.0	73.8	72.6
70	69	69	67	67	67	29	67	99	9	99	65	65	64	64	64	64	63	93	63	62	61
24	25	26	27	28	50	30	31	3.5	. "	34	35	3.6	3.7	80	36	4	41	4.2	43	44	45

ALIGNMENTS

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01-JAN-1990 (REL. 13, CREATED)
01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC
AND ACTIVATING FACTOR) (MCAE) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
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MEDLINE; 90097880.
ROLLINE; 91. STIER P., ERNST T., WONG G.G.;
"The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  [4] SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
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"Struture of human monocyte chemotactic protein gene and its regulation by TPA."
BIOCHEM. BIOPHYS. RES. COMMUN. 169:346-351(1990).
                                                                                                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YOSHIMURA T., YUHKI N., MOORE S.K., APPELLA E., LERMAN M.I.,
99 AA
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 PRT;
STANDARD;
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SEQUENCE FROM N.A.
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   MCP1_HUMAN
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WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A., "Deletion of the NH2-terminal residue converts monocyte chemotactic profein 1 from an activator of basophil mediator release to an eosinophil chemoattractant.";
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PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
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"The structure of MCP-1 in two crystal forms provides a rare example of variable quaternary interactions.";
NAT. STRUCT. BIOL. 4:64-69(1997).
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                                                                                                                                                                           "The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo."; MOL. CELL. BIOCHEM. 126:61-68(1993).
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CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.;
"Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family.";
INT. IMMUNOL. 1:388-399(1989).
                                                                                                                                              LI Y.S., SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F., KOLATTUKUDY P.E.;
                                                                                                                                                                                                                                                                                                           "Human monocyte chemoattractant protein-1 (MCP-1).";
ADV. EXP. MED. BIOL. 305:47-56(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BIOCHEM. BIOPHYS. RES. COMMUN. 167:904-909(1990).
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                                                                                                        SEQUENCE FROM N.A. MEDLINE; 94150478.
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                                                                   chemoattractant protein-3."
FEBS LETT. 395.277-282(1996)
-!- FEBS LETT. 395.277-282(1996)
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF ATHEROSCLEROSIS.
                                                                                                                                                                                       -:- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
-!- PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMATTRACTANT.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
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MISSING: LOSS OF ACTIVITY.
MISSING: 90% REDUCTION IN ACTIVITY.
MISSING: 90% REDUCTION IN ACTIVITY.
D->A: 90% REDUCTION IN ACTIVITY.
N->A: 50% REDUCTION IN ACTIVITY.
R->F: 95% REDUCTION IN ACTIVITY.
S->C: 40% REDUCTION IN ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                         KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D., "Structural characterization of a monomeric chemokine: monocyte
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Y->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
5355B695 CRC32;
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EMBL, M30816; G386961; JOINED.
EMBL, M31625; G386961; JOINED.
EMBL, M24545; G307165; -.
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G641145;
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PIR; S03339; S03339.
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                             MEDLINE; 97053697
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WEMPE F., EINSPANIER R., SCHEIT K.H.; "Characterization by CDNA cloning of the mRNA of a new growth factor from bovine seminal plasma: acidic seminal fluid protein."; BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                Gaps
                                                                                                                                                                                                                                                                                                                                       TISSUE-SEMINAL PLASMA;

WENDLINE; 92096117.

WEMPE F: HENGGHEN A., SCHEIT K.H.;

"Gene expression and cDNA cloning identified a major basic protein constituent of bovine semihal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).";

DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VEMPE F., KUHLMANN J.K., SCHEIT K.H.; Characterization of the bovine monocyte chemoattractant protein-1
                                                                                                                                                                               01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACIIC PROTEIN IA PRECURSOR (MCP-1A) (MCP-1) (ACIDIC PACE PROTEIN).
                                                                                                                                                                                                                                                             BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOYOIDEA; BOVIDAE; BOVINAE; BOS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
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                              0; Indels
Score 84; DB 1; Length 99; Pred. No. 5.10e-07;
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C8F5821D CRC32;
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EMBL; M84602; G163395; -.
PIR; A39296; A39206.
PIR; JC2336; JC2336.
PROSITE: PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; 1DON.
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Query Match
Best Local Similarity 100.0%;
Matches 10; Conservative
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SEQUENCE FROM N.A.
TISSUE~SEMINAL PLASMA;
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                                                                              1 CADPKQKWVQ 10
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MCPA_BOVIN
P28291;
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-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 94114084.
WEMPE F., HARES J., SCHEIT K.H.;
WIGHTE F., HARES J., SCHEIT K.H.;
Ulcoling of the gene for bovine monocyte chemoattractant protein-2.";
DNA CELL BIOL. 13:1-8(1994).
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                                                          Gaps
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
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01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
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Pred. No. 5.10e-07;
0; Mismatches 0; Indels
                                                          0; Indels
   Length 99;
Score 84; DB 1; L Pred. No. 5.10e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9BA2CD26 CRC32;
                                                          0; Mismatches
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                            99 AA
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PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
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10900 MW;
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nes 10; Conservative
Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; S67954; E118856; -. EMBL; S67956; G544997; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                            STANDARD;
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                                                                                                                                                      1 CADPKQKWVQ 10
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24
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MCP2_BOVIN
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DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                              SEQUENCE FROM N.A.

TISSUB-JUGULAR VEIN ENDOTHELIAL;

MEDLINE; 97176620.

KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A.,

LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,

ROSSEN R.D., SANITH C.W., ENTWAN M.L.;

"Induction of monocyte chemoattractant protein-1 in the small veins

of the ischemic and reperfused canine myocardium.";

CIRCULATION 95:693-700(1997).
                                                                                                                                                                                                                               NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYCOARDIUM.
MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE SEPERFUSED MYCOARDIUM.
SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
INDOCTION: BY THE ALBHA.
TISSUE SPECIFICITY: ENDOCHELIUM OF SMALL VEINS AND INTRAFASCICULAR VEINS, AND INFLIFRATING LEUROCYTES.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                              BUT NOT
               EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YOSHIAURA T., YUHKI N.;
"Neutrophil attractant/activation protein-1 and monocyte
chemoattractant protein-1 in rabbit. cDNA cloning and their
                                                                                                                                                                                                                       -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 84; DB 1; Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A7075B14 CRC32;
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LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; U29653; G1144186; --
PROSITE: PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DON.
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATO!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
MEDLINE; 91225489.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34 59 B
35 75 B
101 AA; 11121 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQI
15-JUL-1998 (REL. 36, LAST ANNO
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                                                                                                                                                                                                                                                                                                                                                                                              C-C) (CHEMOKINE CC).
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 CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
24
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P28292;
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                                                               -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE, 94183284.
HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;
HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;
HOSANG K., KNOKE I., SCHEIT K.H.;
(MCP-1): analysis by polymerase chain reaction and cDNA cloning.";
BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
expression in spleen cells.";
J. IMMUNOL. 146:3483-3488(1991).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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0
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ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 84; DB 1; Length 125;
Pred. No. 5.10e-07;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
FBAC9D27 CRC32;
                                                                                                                                                                                                                                                                              PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. 
PFAM; PF00048; i18; 1. 
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL. POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                            59 BY
75 BY
40 PO
55 PO
112 PO
13776 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                             EMBL; M57440; G165470; -.
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                                                                                              C-C) (CHEMOKINE CC).
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125
24
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                                                NEUTROPHILS
                                                                                                                                                                                                                                                                                                                                                                              24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZACH O.R.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCP1_PIG
P42831;
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CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"MONOCYTE CHEMOLACTIC Protein 4 (MCP-4), a novel structural and functional analogue of MCP-3 and eotaxin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N., GARCIA-ZEPEDA E.A., COMBADIERE C., LUSTER A.D.; SARAFI M.N., LLAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.; sa novel CC "Human monocyte chemoattractant protein (MCP)-4 is a novel CC induced in allergic and monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPELBAUM E., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUW T.A., SARAU H.M., MAGNANA J., FOLEY J.J., APPELBAUM E., REAPE T.J., BRANNER M., MAGNANA J., FOLEY J.J., K., CENNIOT D.B., IMBURGIA C., MACULITY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.:
CLONING, In vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine receptor 2B.;
J. BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                               MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOPACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 99;
                                                                                                                                                                                                                                                                                                      CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 83; DB 1; L
pred No. 8.92e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ECC3AFB4 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY
                                                                                                                                                                                         EMBL; X79416; G872313; -. PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; il8; 1. eccb: P13500; lDON.
                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99 AA; 10976 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Conservative
                                                                                                                                                               EMBL; Z48479; G683717; -. EMBL; X79416; G872313; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 97113354.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 96235049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75 CAEPKOKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CADPKOKWVO 10
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35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T 7
MCP4_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                           MOD_RES
                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       --- PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FNPGGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE. (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
--- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                        POWER C.A., MEYER A., RISON S.C.G., GUYE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-1- FUNCTION: CERMOTACTIC FACTOR THAT ATTRACTE MONOCYTES, LYMPHOCYTES,
-1- FUNCTION: CERMOTACTIC FACTOR THAT ATTRACTES, DATOR THEORY THE ACCUMULATION OF COR2B AND CGR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF MAY BE INVOLYED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF ARTHEROSCIEROSIS. MAY PLAY A PRODUCTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -:- MASS_SPECTROMETRY: MW=9314; MW_ERR=30; METHOD=MALDI; RANGE=17-98.
-:- MASS_SPECTROMETRY: MW-8760; MW_ERR=30; METHOD=MALDI; RANGE=22-98.
-:- MASS_SPECTROMETRY: MW-8575; MW_ERR=30; METHOD=MALDI; RANGE=24-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       --- INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
--- TISSUE SPECIFICITY: UNDELY EXPRESSED. FOUND IN SMALL INTESTINE,
THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
--- THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 4.
PYRROLIDONE CARBOXYLIC ACID.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
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Pred. No. 4.71e-06;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1994 (REL. 29, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                      DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DF52F6EC CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMEL, AC002482, G2340091; -.
EMBL, 828306; E248571; -.
MIN, 601391; -.
PROSITE, PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
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98
M
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58
58
74
29
10986 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95.2%;
similarity 90.0%;
9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U46767; G1732123; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PEAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EXOGENOUS PATHOGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CADPKQKWVQ 10
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                                                                                                                                            SEQUENCE FROM N.A.
                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOD_RES
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                                                                     MEDITAE: 95173589.
ROTHENBERG M.E., LUSTER A.D., LILLY C.M., DRAZEN J.M., LEDER P.; "Constitutive and allergen-induced expression of ectaxin mRNA in the
                                                                                                                                                                                                                                                                                                 STRAIN-HARTLEY: TISSUE-LUNG;
MEDLINE; 94157409.
JOSE P. J. (RIFFITHS-JOHNSON D.A., COLLINS P.D., WALSH D.T.,
MOOBEL R., TOTIX N.F., TRUONG O., HSTAN J.J., WILLIAMS T.J.;
Estaxin: a potent eosinophil chemoattractant cytokine detected in a J. Est. MED. 179:8818-887(1994).
J. Exp. MED. 179:881-887(1994).
J. FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT STATURE OF ALLERGIC INFLAMMATORY REACTIONS.
                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE: 95091818.
WELLS T.C., MILLIAMS T.J., POWER C.A.;
"Externin: cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged guinea-pig lungs.";
BIOCHEM. BIOPHYS. RES. COMMUN. 205:788-794(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -i- TISSUE SPECIFICITY: LUNG.
-i- PTM: O-GLYCOSYLATED (PROBABLE).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
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Pred. No. 2.43e-05;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PFAM; PF00048; il8; 1. HSSP; P13500; 1MCA.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
D -> G (IN REF. 2).
DD28C7E5 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ECTA_HUMAN STANDARD; PRT; 97 AA. P51671; P50877; 092490; 092491; 01-0CT-1996 (REL. 34, CREATED) 01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOTAXIN.
                                                                                                                       guinea pig lung.";
J. EXP. MED. 181:1211-1216(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10753 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90.06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U18941; G687656; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NFLAMMATORY RESPONSE
                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                       SEQUENCE OF 24-96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72 CADPKKKWVQ 81
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 AA:
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32
93
88
                                                               TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
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PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., KASSAM N., SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.C.,
                                                                                                                                       LUSTER A.D.;
"Human eotaxin is a specific chemoattractant for eosinophil cells and
provides a new mechanism to explain tissue eosinophilia.";
NAT. MED. 2:449-456(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 97312708.

GARCIA-ZEPEDA E.A., ROTHENBERG M.E., WEREMOWICZ S., SARAFI M.N.,
MORTON C.C., LUSTER A.D.;
"Genomic organization, complete sequence, and chromosomal location of
the gene for human ectaxin (SCYAII), an eosinophil-specific CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BARTELS J., SCHLUETER C., RICHTER E., NOSO N., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.;
"Human dermal fibroblasts express ectaxin: molecular cloning, mRNA expression, and identification of ectaxin sequence variants.";
BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
                                                                                                                                                                                                                                                                 MACKAY C.R.,
"Cloning of the human eosinophil chemoattractant, eotaxin.
Expression, receptor binding, and functional properties suggest a mechanism for the selective recruitment of eosinophils.";
J. CLIN. INVEST. 97:604-612(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genomic organization, sequence, and transcriptional regulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDILINE; 97445071.
HEIN H., SCHLUETER C., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.,
                                                                                                                                                                                                                                                                                                                                                                                            KITCHURA M., NAKAJIMA T., IMAI T., HARADA S., COMBADIERE C., TIFFANY H.L., MURPHY P.M., YOSHIE O.; "Molecular cloning of human ectaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil ectaxin receptor, CC chemokine receptor 3.";
                                       HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A., SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
                                                                                                              MEDLINE; 96181758.
GARCIA-ZEPEDA E.A., ROTHENBERG M.E., OWNBEY T.R., LEDER P.,
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the human ectaxin gene.";
BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
TISSUE=SMALL INTESTINE;
MEDLINE; 96205964.
                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 96189937.
                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=FORESKIN;
MEDLINE; 96374440.
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TISSUE=LUNG
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P48298;
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                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                         11
                                                                                                                                                                                                       SIGNAL
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                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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--- SUBCELLULAR LOCATION: EXTRACELLULAR.
--- PIDM: O-GLYCOSYLATED (PROBABLE).
--- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE).
      -!- PTM: O-GLYCOSYLATED (PROBABLE).
-!- INDUCTION: BY TNF-ALPHA, IL-1-ALPHA AND INTERFERON GAMMA.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P97545; 008780; CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
RATTUS NORVEGIUSG (RAT).
RATTUS NORVEGIUSG (RAT).
RUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA; SCIURGGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 97;
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WILLIAMS C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C.,
                                                                                                                                                                                                                                                                                                                             EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE; POLYMORPHISM; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                                                                                                         L -> P (IN CLONE 34).
A -> T (IN CLONE 53).
R -> S (IN CLONE 34).
K -> R (IN CLONE 34).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 77; DB 1; Le
Pred. No. 2.43e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97 AA.
                                                                                                                                                                                                                                                                                           PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                        EOTAXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10732 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.0%;
                                                                                                                                                                                                                   269291; E221070; 275668; E251275; 275669; E251258; 146572; G2088509; 292709; E329504;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-C) (CHEMOKINE CC).
                                                                                                                                                                              EMBL; U46573; G1280141; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                             U34780; G1185440; -. D49372; G1552241; -.
                                                      C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                         2EOT; 11-NOV-98.
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                                                                                                                                                                                                                                                                                                              118;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PEDROCTION: IN RESEPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEAVURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT FEAVURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT FEAVURCHES, MACROPHAGES OR NEUTROPHILS.

-! SUBCELLULAR LOCATION: EXTRACELULAR.
-! TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
-: TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.

-: INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-!- PIN: O-GLYCOSYLATED (PROBABLE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ROTHENBERG M.E., LUSTER A.D., LEDER P.;
"Murine ectaxin: an eosinophil chemoattractant inducible in endothelial cells and in interleukin 4-induced tumor suppression."; PROC. NATL. ACAD. SCI. U.S.A. 92:8960-8964(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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                                                                                                                                                                                                                                                                                                                                                                                                                       EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
ECTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . -> S (IN REF. 2).
05B4ED45 CRC32;
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Pred. No. 2.43e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                     PROSTIE: PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
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90.0%;
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                                                                                                                                                                                                                                                                                    EMBL; Y08358; E274141; -. EMBL; U96637; G2098785; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFLAMMATORY RESPONSE
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 -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                              Gaps
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LAUREYS G., VAN DAMME J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MINTY A., CHALON P., GUILLEMOT J.C., KAGHAD M., LIAUZUN P., MAGAZIN M., MILOUX B., MINTY C., RAMOND P., VITA N., LUPKER J., SEHIRE D., FERRARA P., CAPUT D.; Molecular cloning of the MCP-3 chemokine gene and regulation of its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPDENAKER G., FROYEN G., FILEN P., PROOST P., VAN DAMME J., "Human monocyte chemotactic protein-3 (MCP-3): molecular cloning of the CDNA and comparison with other chemokines.", BIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LAUREYS G., VAN DAMME J.;
"The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA7 OR MCP3.
HOMO SAPIENS (HUMAN).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-1992 (REL. 24, CREATED)
10-DEC-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN: 3 PRECURSOR (MCP-3) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                         Score 77; DB 1; Length 97;
Pred. No. 2.43e-05;
0; Mismatches 1; Indels
                                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-99.
                                                                                                                                                                                                                                                                                    BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99 AA.
                                                                                                                                                          EMBL; U40672; G1113937; MGD: MGI:103576; SCXA11, PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                             EOTAXIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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                                                                                                                                                                                                                                                                                                             97 AA; 10893 MW;
                                                                                                                                                                                                                                                                                                                                        91.78;
90.08;
                                                                                                                                                EMBL; U26426; G995911; -.
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                           23
97
57
                                                                                                                                                                                                                                          INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                    P80098; 1NCV
                                                                                                                                                                                                                                                                                                                                                                                      73 CADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                               1 CADPROKWVQ 10
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MEDLINE; 94375065.
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                                               VAN DAMME J., PROOST P., LENAERTS J.-P., OPDENAKKER G., "Structural and functional identification of two human, tumor-derived monocyte chemotactic proteins (MCP-2 and MCP-3) belonging to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -1- PTM: O-GIYCOSYLATED.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SPECIAL SOCIATION OF THE STATE AND SOCIAL SO
                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Determination of the three-dimensional structure of CC chemokine monocyte chemoattractant protein 3 by 1H two-dimensional NMR
                                                                                                                                                                                                                                                                                                                                                                                                                     MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON "Determination of the three-dimensional structure of CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                              KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.; "Structural characterization of a monomeric chemokine: monocyte chemoattractant protein-3."; FEBS LETI. 395:277-282(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MONOCYTE CHEMOTACTIC PROTEIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 77; DB 1; Length 99;
Pred. No. 2.43e-05;
...anatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T -> K (IN REF. 4).
MISSING (IN REF. 4).
7502E19C CRC32;
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; X72308; G313708; ALT_INIT.
EMBL; X72309; ', NOT_ANNOTATED_CDS.
EMBL; X71087; G288399; 'OTTATED_CDS.
EMBL; X71087; G288398; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
PIR; S32222; S3222
PIR; A54678; A54678.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                              STRUCTURE BY NMR, AND SUBUNIT.
                                                                                                                                                 EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11200 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9; Conservative
  TISSUE=OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PFAM; PF00048; 118;
CYTOKINE; CHEMOTAXT
                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 97263733
                                                                                                                                                                                                                                                                                                                                                                           STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  spectroscopy.
                                                                                                                                                                                                                         MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
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RESULT

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                             "POCTION LULEAL CELLS EXPLESS MONOCYTE CHEMOALTRACTANT Protein-2 (MCP-2): analysis by CDNA cloning and northern analysis."; (MCP-2): analysis by CDNA cloning 205:148-153(1994).

-i. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                      -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "cDNA cloning of guinea pig monocyte chemoattractant protein-1 and
                                                                                                                                                                                                  HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., WUTIKE W.W., SCHEIT K.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAVIA PORCELLUS (GUINEA PIG).
EUKRRYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                 SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1995 (REL. 32, LAST SECOENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                               01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 77; DB 1; Le
pred. No. 2.43e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
B7620BCF CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT; 120 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
99 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1995 (REL. 32, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99 AA; 10903 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     larity 90.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=Z; TISSUE=SPLEEN; MEDLINE; 93267104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; 248480; G683719; -
                                                                                                                                                                                                                                                                                                                                            C-C) (CHEMOKINE CC).
    STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
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                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCP1_CAVPO
                                                                                                          SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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         MCP2_PIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
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NARAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
member of rat GRO/CINCs, is a predominant chemokine produced by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHI M.M., GODIESKI J.J., PAULAUSKIS J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages.";
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                   -:- SUBUNIT: MONOMER OR HOMODIMER: IN EQUILIBRIUM (BY SIMILARITY).
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SHANLEY T.P., SCHWAL H., FRIEDL H.P., JONES M.L., WARD P.A.; "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
                                                                                                                                                                                                                                                                                                    CYIOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
SCYA3 OR MIP1A.
        J. IMMUNOL. 150:5025-5032(1993).
-!- FUNCIION: CHEWOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
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                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 77; DB 1; L. Pred. No. 2.43e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
22FAD257 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92 AA.
                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
BY SIMILARITY
                                                                                                                                                                                                                                                          PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
expression of the recombinant protein.";
                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ute lung injury in rats.";
IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=LONG EVANS; TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                      13741 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-CD-1; TISSUE-LUNG;
MEDLINE; 95298037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                    EMBL; L04985; G349821; -.
                                                                                                                                                                                                                                                                                                                                                                                          57
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34
97
120 AA;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 CADPTQKWVQ 82
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                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
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lipopolysaccharide-stimulated rat macrophages in culture.";
BIOCHEM. BIOPHYS. RES. COMMUN. 220,945-948(1996).
-! FUNCTION: MONORINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSTNOPHILS,
PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG IN-LICHA
MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
ADHESION WOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROPIEIN
                                                                                                                                            INDUCTION: BY LIPOPOLXSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                  MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 73; DB 1; Length 92;
Pred. No. 2.07e-04;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                          EMBL; U22414; G790633; -.
BMBL; U06435; G459150; -.
PROSITE; PS000475; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13236; 1HUN;
                                                                                                                                                                                                                                                                                                                                                                                                   23
92
87
87
6
57
10335 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match
Local Similarity 80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 CADPKETWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 16:58:49 2000; MasPar time 3.53 Seconds 113.540 Million cell updates/sec

Tabular output not generated.

>US-09-150-813-7 (1-10) from US09150813.pep 84 1 CADPKQKWVQ 10 Description: Perfect Score: Sequence:

122810 seqs, 40068593 residues PAM 150 Gap 15 Scoring table:

Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

pir60 1:pir1 2:pir2 3:pir3 4:pir4 Database:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. Mean 23.976; Variance 35.473; scale 0.676 Statistics:

SUMMARIES

Pred. No.	7,50e-06 7,50e-06 7,50e-06 1,23e-05 2,34e-04 2,34e-04 2,34e-04 1,58e-03
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ALIGNMENTS

A60299 #type complete monocyte chemoattractant protein 1 precursor - human GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1; monocyte chemotactic factor 1; monocyte secretory protein; tumor-derived chemotactic factor glioma-derived chemotactic factor 2 (GDCF-2) glioma-derived chemotactic factor 1 (GDCF-2) glioma-derived chemotactic factor 2 (GDCF-2) glioma-derived chemotactic factor 1 (GDCF-2) glioma-derived chemotactic factor 2 (GDCF-2) glioma-derived chemotactic factor 3 (GDCF-2) glioma-derived chemotactic factor 4 (GDCF-2) glioma-derived chemotactic factor 4 (GDCF-2) glioma-derived chemotactic factor 4 (GDCF-2) glioma-derived chemotactic factor 7 (GDCF-2) glioma-deriv		# A C C C	S03339 YOSHIMULT M.I.; FEBS Let Human mc CDNA mononv compet compet S033391 Ille_type mRI es Il-i
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, T.;
Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, K.
#title Cloning and sequencing of the cDNA for human monocyte
chemotactic and activating factor (MCAF).
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Mol. Cell. Biochem. (1993) 126:61-68
The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
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                                   #authors Yoshimura, T.; Leonard, E.J.
#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references MUID:92095166
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##experimental_source glioma cell line U-105MG
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#product monocyte chemoattractant protein 1 #status
experimental #label MAT\
experimental #label MAT\
#product monocyte chemoattractant protein 1, short form
#status experimental #label MAT\
#modified_site pyrrolidone carboxylic acid (Gln) (in
mature form) #status experimental\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
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#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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Blochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
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#Superfamily macrophage inflammatory protein
#length 99 #molecular-weight 11114 #checksum 9401
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DNA Cell Biol. (1991) 10:671-679
                            ##molecule_type mRNA
##residues 24-28,'Q',30-99 ##label YEQ
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#journal J. Immunol. (1991) 146.3483-3488
#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.
#cross-references MUID:91225489
#accession 146857
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monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.;
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                                                                                                                                                                                                                                                                   #domain signal sequence #status predicted #label SIGN #product monocyte chemcattractant protein 1 #status predicted #label MATN (covalent) #status #binding_site carbohydrate (Asn) (covalent) #status
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#formal_name Oryctolagus cuniculus #common_name domestic
Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monogyte-chemoattractant protein-1 (MCP-1).
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                                                                                                       ##residues 1-99 ##label WEM ##cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
                                                                                                                                                                                                                                                                                                                                                               #length 99 #molecular-weight 11114 #checksum 9401
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                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 84; DB 2; Length 99; 100.0%; Pred. No. 7.50e-06;
                                                                                                                                                                    ##molecule_type protein
##residues 50-68,'x',70-74,'x',76 ##label WE2
##experimental_source seminal vesicle
##experimental_source seminal macrophage inflammatory protein
FICATION #superfamily macrophage inflammatory protein
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                                                              #cross-references MUID:92096117
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nes 10; Conservative
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J. Exp. Med. (1995) 181:1211-1216
Constitutive and allergen-induced expression of ectaxin mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #domain signal sequence #status predicted #label SIGN #product monocyte chemoattractant protein-1 #status predicted #label MATN predicted #label MATN #binding_site carbohydrate (Asn) (covalent) #status
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#formal_name Rattus norvegicus #common_name Norway rat
21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change
#journal Biochem. Biophys. Res. Commun. (1994) 199:962-968
#title Porcine luteal cells express monocyte chemoattractant protein-1 (MOP-1): Analysis by polymerase chain reaction and cDNA cloning.
#cross-references WID:94183284
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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Pred. No. 2.34e-04;
0; Mismatches 1;
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A54678; JC1478; S32222

ACCESSIONS

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#Fresidues 1-96 ##label Jos #Fresidues 1-96 ##Tabel Jos #Fresidues EMBL:X77603; NID:9602551; PID:9602552 This protein is identified as a potent eosinophil chemoattractant.
                Jose, P.J.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman, N.; Wells, T.N.C.; Williams, T.J.; Power, C.A.
Biochem. Biophys. Res. Commun. (1994) 205:788-794
Extaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
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#formal_name Sus scrofa domestica #common_name domestic pig
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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#product ectaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
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Schelt, K.H.
Blochem. Blophys. Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
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Monocyte chemotactic protein 3 precursor - human
monocyte chemoattractant protein MCP-3
#formal_name Homo sapiens #common_name man
28-0cr-1994 #sequence_revision 28-0cr-1994 #text_change
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Pred. No. 2.34e-04;
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llarity 90.0%;
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Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408

The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #authors Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. Williamited to the EMBL Data Library, March 1993 Molecular cloning of MCP-3: a human monocyte-derived monocyte
                                                                                                                                                                                                                                                                                        Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme,
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Human monocyte chemotactic protein-3 (MCP-3): Molecular
Cloning of the CDNA and comparison with other chemokines.
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#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
#cross.references MUID:93267100 of the recombinant protein.
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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##cross-references EMBL:X71087; NID:9288396; PID:9288397
This protein induces proteinase secretion and chemotaxis by
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#length 109 #molecular-weight 12356 #checksum 1535
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Best Local Similarity 90.0%; Pred. No. 2.34e-04;
Matches 9; Conservative 0; Mismatches 1; Indels
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#map_position 17q11-17q12
#introns 36/1; 75/2
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cross-references MUID:94375065
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Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular cloning, mRNA expression, and identification of ectaxin sequence
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##exposs-references EMBL:275668; NID:91531982;
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Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May_1998 #sequence_revision 29-May-1998 #text_change
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#formal_name Homo sapiens #common_name man
01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change
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#length 120 #molecular-weight 13741 *checksum 9252
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##status preliminary; translated from GB/EMBL/DDBJ#maroid...type mRNA ###noleminary
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Pred. No. 2.34e-04;
0; Mismatches 1; Indels
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##cross-references GB:L04985; NID:9349820; PID:9349821
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DATE

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Yoshimura, T.; Yuhki, N. J. 1883-3488 J. Immunol. (1991) 146:3483-3488 Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ishikawa, J.; Suzuki, S.; Hotta, K.; Hirota, Y.; Mizuno, S.; Suzuki, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This protein is a polymorphonuclear leukocyles chemotactic factor and is involved in the host defense function.
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A novel neutrophil chemoattractant generated during an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                 #formal_name_Canis_lupus_familiaris #common_name dog
19-May-1994_#sequence_revision 19-May-1994_#text_change
                                                                                                                                                            Gaps
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#superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611 #checksum 3157
##residues 1-92 ##label RES ##cross-references EMBL:U22414; NID:9790632; PID:9790633 CLASSIFICATION #superfamily macrophage inflammatory protein sUMMARY #length 92 #molecular-weight 10335 #checksum 3184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #journal Gene (1993) 131:305-306
#title Cloning of a canine gene homologous to the human interleukin-8-encoding gene.
#cross-references MUID:94010328
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##residues 1-101 ##label YOS
##cross-references GB:M57439; NID:q165553
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                                                                                                            Score 73; DB 2; Length 92;
Pred. No. 1.58e-03;
1; Mismatches 1; Indels
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80.0%; Pred. No. 1.58e-03;
ative 1; Mismatches 1;
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interleukin-8 - rabbit
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                                                                                                                                                                                                                                                                                                                                                                             - dog
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Best Local Similarity 80.0%;
Best Local Similarity 80.0%;
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                                                                                                                     Query Match 86.9%;
Best Local Similarity 80.0%;
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                                                                                                                                                                     8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##molecule_type DNA
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#authors Seow, H.F.; Yoshimura, T.; Wood, P.R.; Colditz, I.G. Immunol. Cell Biol. (1994) 72:398-405
#title Cloning, sequencing, expression and inflammatory activity in skin of ovine interleukin-8.
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                                                                                                                                                                                                                                           Gaps
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CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 101 #molecular-weight 11292 #checksum 294
                                                                                                                                                                                    Ouery Match 86.9%; Score 73; DB 2; Length 101; Best Local Similarity 80.0%; Pred. No. 1.58e-03; Matches 8; Conservative 1; Mismatches 1; Indels
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Best Local Similarity 80.0%; Score 73; DB 2; Length 101;
Best Local Similarity 80.0%; Pred. No. 1.58e-03;
Matches 8; Conservative 1; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                       #type complete
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ##molecule_type mRNA
##residues 1-103
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| CADPKQKWVQ 10
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                                                                                                        ##residues
CLASSIFICATION
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                                                                                                                                                                                                                                                                                                                                            RESULT 15
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                                                                                                                                       KEYWORDS
SUMMARY
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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 16:53:42 2000; MasPar time 3.53 Seconds 72.208 Million cell updates/sec Tabular output not generated.

Run on:

(1-12) from US09150813.pep 97 1 EICADPKOKWVO 12 >US-09-150-813-1 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

170751 seqs, 21266608 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

| part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part1 8:part12 13:part13 14:part11 12:part12 13:part13 14:part14 15:part19 10:part10 11:part11 18:part18 15:part15 16:part16 17:part17 18:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 32:part32 33:part33 34:part34 33:part35 36:part36 37:part37 38:part38 a-geneseq35 Database:

Variance 64.805; scale 0.285 Mean 18.469; Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	7, 70e-03 7, 70e-03
	Description	Monocyte chemoattract Monocyte chemoattract Monocyte chemoattract Monocyte chemoattract des(2-8) MCP-1. Monocyte chemotactic (28-Asp) MCP-1. Mature human monocyte MCF. (3-Ala) MCP-1. Macrophage chemoattra Sense MCP-1. Monocyte chemoattra (24-Arg) MCP-1. Monocyte chemoattra Monocyte chemoattra Monocyte chemoattra
	ID	W13598 W13599 W13596 W13596 W13596 W13596 W131131 R28660 W40175 W40175 R3398 R37680 R87680 R876859
	DB	24 24 24 24 20 20 11 21 14 11 14 11 15
	ength	66 67 69 69 76 76 76 76 76 76 76 76 76 76
æ	Query Match Length	1000.0 1000.0 1000.0 1000.0 1000.0 1000.0 1000.0 1000.0 1000.0
	Score	97 97 97 97 97 97 97 97 97
	Result No.	110 110 111 111 111 111 111 111 111

Gaps

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7.70e-03 7.70e-03 7.70e-03 7.70e-03 7.70e-03 7.70e-03 7.70e-03 2.03e-02 2.03e-02 2.03e-02 2.03e-02 2.03e-02 2.03e-02 2.03e-02 2.03e-02 2.03e-02 2.03e-02 4.17e-02 4.17e-02 4.17e-02 4.17e-02 5.29e-02 5.29e-02	.0.
Human monocyte chemo- Chemoattractant prote Macrophage chemoattra MCF. Droils chemokine beta Droils chemokine beta Droils chemokine beta Bac 3 chemokine beta Bac 3 chemokine beta Bac 2 chemokine beta Bac 1 chemokine beta Bac 1 chemokine beta Bac 1 chemokine beta Bac 1 chemokine beta Haran monocyte chemoa Human chemokine beta Human achta chemoa Chemotyte chemoa Chemoattractant prote Cytokine encoded by c Amino acid sequence o Human eosinocyte Ct Human eosinocyte CC	Murine monocyte chemot Mouse monocyte chemot Guinea pig eosinocyte
P95387 R73914 R73914 R70800 W20800 W22675 W22673 W22672 W22672 W22671 W17665 W30191 W30191 W30191 W30191 R70801 R7	W56088 W57322 W14991
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ALIGNMENTS

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                                                                                                 Monocyte chemoattractant protein analogue MCP-1 (10-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 97; DB 24; Length 66;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
T
W13598 standard; peptide; 66 AA.
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Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                     07-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                       19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gong J, Lewis I;
WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lewis I;
                                                                                                                                                                                                                                                                     lung disease.
                                                                                                                                                                                                                                                                                                          Homo sapiens.
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RESULT
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anti-inflammatory agent

Tanti-inflammatory agent

The season of present sequence represents an analogue, MCP-1 (11-76), of monocyte

The present sequence represents an analogue, MCP-1 (11-76), of monocyte

Commontaretant protein-1 (MCP-1), acts as an antagonist of MCP-1

The analogue is useful as an anti-inflammatory agent to block

The effects of MCP-1 which is an inflammatory mediator causing migration

The effects of MCP-1 which is an inflammatory mediator causing migration

The effects of MCP-1 which is an inflammatory agent to block

The effects of MCP-1 which is an inflammatory agent to block

The effects of MCP-1 which is an inflammatory agent to block

The effects of MCP-1 which is an inflammatory agent to block

The effects of MCP-1 which is an inflammatory agent to block

The effects of MCP-1 which is an inflammatory and inflammatory diseases e.g. arthritis, arteriosclerosis and chronic

The analogue competes more effectively with MCP-1 for binding

The providing 50% inhibition of binding at a 25:1 ratio or less, compared
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Claim 7: Page 5: 27pp; English.
The present sequence represents an analogue, MCP-1 (9-76), of monocyte
chemoattractant protein-1 (MCP-1). The analogue, which lacks the
                                                                                                                                                                                                                                                                                                                                                                                                         N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                Monocyte chemoattractant protein analogue MCP-1 (11-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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                                                                                                        W13599 standard; peptide; 67 AA.
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Best Local Similarity 100.0%;
12: Conservative
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19-JUN-1995; CA-152141.
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19-JUN-1995; CA-152141.
 40 eicadpkqkwvq 51
                                   1 EICADPKQKWVQ 12
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WPI; 97-165844/16.
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WPI; 97-165844/16.
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The anti-inflammatory agent as a nantagonist of MCP-1 as thacks wor-1 biological activity and inhibits binding to a MCP-1 anti-inflammatory agent to block as the effects of MCP-1 which is an inflammatory mediator causing migration and monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and chronic alseases. The analogue competes more effectively with MCP-1 for binding providing 50% inhibition of binding at a 25:1 ratio or less, compared Sequence 69 AA;
N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory adiators into inflammatory diseases. The analogue competes more than the inflammatory diseases e.g. arthritis, arteriosclerosis and several lung MCP-1 receptors than prior art mutant versions of MCP-1 for binding providing 50% inhibition of binding at a 25:1 ratio or less, compared Sequence 68 AA;
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Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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100.0%; Score 97; DB 24; Length 68;
Best Local Similarity 100.0%; Pred. No. 7.70e-03;
Matches 12; Conservative 0; Mismatches 0; Indels
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Pred. No. 7.70e-03;
0; Mismatches 0; Indels
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R87678 standard; protein; 69 AA.
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es 12; Conservative
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19-JUN-1995, 152141.
19-JUN-1995, CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                               42 eicadpkqkwvq 53
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WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CA2152141-A.
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Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are randogenous MCP-1 and can be used to treat restenosis endogenous MCP-1 and can be used to treat restenosis endogenous MCP-1 and can be used to treat restenosis endogenous MCP-1 and can be used to treat restenosis endogenous MCP-1; Page 11; 22pp; English.

Sometime of the protein of the monocyte chemoattractant activity of endogenous chart they inhibit the monocyte chemoattractant activity of endogenous that they inhibit the monocyte chemoattractant activity of endogenous chart they inhibit the monocyte chemoattractant activity of endogenous mCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30-Arg by Val. Preferred mutations can be the present sequence is a specifically claimed human MCP-1 acids 2-8. The present sequence is a specifically claimed human MCP-1 acids 2-8. The present sequence is a specifically claimed human MCP-1 acids 2-8. The present protein disclosed in Rollins, Molecular derivative based on the parent protein disclosed in Rollins, Molecular Can Present endogenous and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) -
Anti-sense Monocyte Chagnosis of restenosis, etc.
Disclosure: Column 13-14; 16pp; English.
This is the amino acid sequence of the human monocyte chemoattractant
This is the amino acid sequence of the human monocyte chemoattractant
This is the amino acid sequence of the human monocyte chemoattractant
This is monocyte chemotaxis and is produced by injured vascular
stimulator of monocyte chemotaxis and is produced by injured vascular
smooth cells thus attracting monocytes and macrophages which infiltrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                       _____ amino acids 2-8 of the native protein have been deleted between these residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAR-1997 (first entry)
Monocyte chemotactic protein 1.
Human; monocyte chemoattractant protein; antisense; inhibition;
Human; monocyte chemoattractant prothege; smooth muscle cell;
vascular restenosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 97; DB 14; Length 69;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "encoded by codon CAC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note= "encoded by codon CAG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "note= "encoded by codon AUG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            undergoing coronary artery angioplasty.
Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-NOV-1996.
22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-MMAY-1994; US-250958.
(UNMI ) UNIV MICHIGAN.
KUNKel SL, Lyle LR, Strieter RM;
WPI; 96-505405/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                   18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
Rollins B, Zhang YJ;
                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; Protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    y Match 100.0%;
Local Similarity 100.0%;
hes 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_difference 65
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                                                                                                            disulfide_bond
                                                         modified_site
                    Homo sapiens.
angioplasty
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Disclosure; page 3; 46pp; English.
Disclosure derived from glioma cell line U-105MG (ATCC CR19932) or from Peptide is derived from glioma cell line U-105MG (ATCC CR19932) or from Leukocytes and has mol. wt. 8400. Used to treat infections and neoplasms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI: 89-263501/36.
WPI: 89-263501/36.
New peptide with specific chemotactic activity for monocytes - isolated from glioma or leucocyte cells, useful for treating infections and from glioma or leucocyte cells, useful for treating infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -- "Tyr in the native sequence is replaced by Asp"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 97; DB 1; Length 76; 100.0%; Pred. No. 7.70e-03; rvative 0; Mismatches 0; Indels
                                                                                                                          Score 97; DB 20; Length 76;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSH) US Dept. of Health and Human.
Yoshimura T; Robinson E; Appella E; Leonard E.
                                                                                                                                                                                                                                                                                                                         cell line U-105MG.
                                                                                                                                                                                                                                                                                                                                                                                                               /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                Peptide from human glioma cell line U-103
Glioma; leucocyte; chemotaxis; neoplasms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-NOV-1993; US-152301.

12-NOV-1993; US-152301.

IOAND ) DANA FARBER CANCER INST INC.

ROLLINS B, Zhang YJ;

WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
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                                                                                                                                                                                                                                                                                P90292 standard; peptide; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                    /label= OTHER
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                                                                                                                                 Query Match
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                -JAN-1990 (first entry)
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07-NOV-1994; U12874.
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                                                                                                                                                                                                                31-JAN-1989; 030423.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disulfide_bond
disulfide_bond
WO9513295-A1.
                                                                                                          76 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     angioplasty
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                                                                                                                                                                                                                                                                                                                                                                                                                                    US7304234-A.
                                                                                                 restenosis.
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                                                                                                             Seguence
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PT capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis

Calma 3: Page 11: 22pp; English.

Comocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous constitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations care: (1) substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations of 24 pp. Ph; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 and Callular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                targetted delivery of radioactive agent
Example 10: Column 19-20: 15pp: English.
Wall31 represents mature human monocyte chemoattractant protein-1
Wall31 represents mature human monocyte chemoattractant protein-1
(MCP-1). MCP-1 was radionuclide labelled and used in a method for
imaging a target site in vivo in an animal. Labelled MCP-1 was allowed
to accumulate at a target site (having MCP-1 receptors) in the animal
chemokine carrying either iodine-123 or iodine-131 can be used in the
method. Especially preferred is neutrophil activating peptide-2 (NAP-2)
which recognises interleukin-8 receptors and is labelled with
The method can be used for imaging a site of infection, inflammation,
accommon a significant or restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mature human monocyte chemoattractant protein-1 (MCP-1).
MCP-1; mature chemoattractant protein-1; cytckine; interleukin-8;
IL-8; neutrophil activating peptide; labelling; imaging; targeting;
radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                   ;
0
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                                                                                                                                                                                                                                                                                   Score 97; DB 14; Length 76;
Pred. No. 7.70e-03;
Vinmatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 97; DB 21; Length 76;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "X= any amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kunkel SL, Lyle LR, Strieter RM;
WPI; 97-153541/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W11131 standard; protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (WLCW ) MALLINCKRODT MEDICAL INC. (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                       / Match
Local Similarity 100.0%;
hes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JUN-1997 (first entry)
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Sest Local Similarity 100.0%;
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05-OCT-1992; US-956862.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-APR-1994; US-235659
                                                                                                                                                                                                                                                                                                                                                             50 eicadpkqkwvq 61
                                                                                                                                                                                                                                                                                                                                                                                      05-OCT-1992; 956862.
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Gaps

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0; Indels

Score 97; DB 5; Length 76; Pred. No. 7.70e-03; 0; Mismatches 0; Indels

// Match
Local Similarity 100.0%;

Query Match

Matches

12; Conservative

E.coli strains.

R. coli strains.

Claim 1; Page 48 + Page 36; 56pp; English.

Claim 1; Page 48 + Page 36; 56pp; English.

Of 76 amino acids was constructed. The prod. can be used for e.g.

treating bacterial infectious diseases.

Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific

12-NOV-1992. 27-APR-1992. 20-MAY-1991. JP-135550. (DAIN) DAINIPPON PHARM CO LTD. FUKUI T, MATSHO N, Yamada M, Yamagishi J; WPI: 92-398864/48.

Plasmid; monocyte chemotactic factor; MCF; translation; termination; terminator; initiation; ribosome binding site; RBS; promoter; tryptophan; repressor.

R28660 standard; Protein; 76 AA.

24-MAR-1993 (first entry)

R28660;

RESULT

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'note= "Asp in the native sequence is replaced by Ala"
                                            monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                              undergoing coronary artery angioplasty.
                                                           Location/Qualifiers
                          R8767\overline{7} standard; protein; 76 AA.
                                   21-FEB-1996 (first entry)
.50 eicadpkqkwvq 61
        1 EICADPKQKWVQ 12
                                                                       disulfide_bond
                                                                             disulfide_bond
                                                              modified_site
                                                      Homo sapiens.
                                        (3-Ala) MCP-1
                      RESULT
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Gaps

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12; Conservative

Matches

50 eicadpkqkwvq 61

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12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
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Local Similarity 100.0%;
hes 12; Conservative
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                                                                                                                                                                                                       100.0%;
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Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Naruto M;
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13-SEP-1993; JP-227385.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TORA ) TORAY IND INC.
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                                                                                                                                                                                                                                                                        50 eicadpkqkwvq 61
                                                                                                                                                                                                                                                                                                        1 EICADPKQKWVQ 12
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WPI; 95-131181/17.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-MAR-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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855555555555588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents a monocyte chemoattractant peptide (MCP) The present sequence represents a monocyte chemoattractant peptide (MCP) are present sequence represents and peripheral blood mononclear U-105MG (e.g. present sequence) and peripheral blood mononclear up-105MG (e.g. present sequence) and peripheral blood mononclear in humans. Short peptides derived from MCPs can be screened to identify those that can bind to the monocyte receptor without stimulating a chemotactic response. These are potentially useful for treating inflammation associated with monocyte infiltration.
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Macrophage chemoattractant peptide designated GDCF-2.
Macrophage chemoattractant peptide; MCP: MCP-1; treatment; neoplasm;
Monocyte chemoattractant peptide; MCP: MCP-1; treatment; neoplasm;
infection; human; monocyte receptor; chemotactic response; inflammation;
monocyte infiltration.
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                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense; RNA; DNA; monocyte chemotactic protein-1; MCP-1; radionuclide; vascular restenosis; alpha; beta; emitting isotope; diagnosis; monocytes; vascular injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide with chemotactic activity for monocytes - from human monocytes or glioma cells, useful for treating infections and
                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 97; DB 30; Length 76;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
   Best Local Similarity 100.0%; Pred. No. 7.70e-03; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     (USSH ) US DEPT HEALTH & HUMAN SERVICES.
Appella E, Leonard EJ, Robinson EA, Yoshimura T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _note= "Unspecified amino acid"
                                                                                                                                                                                                                                                                                                                       /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R53398 standard; Protein; 76 AA.
                                                                                                                                                         W40175 standard; Protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-DEC-1994 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-APR-1994.
20-OCT-1993; U10074.
22-OCT-1992; US-965678.
                                                                                                                                                                                                                                                                                                                                                                                            30-MAR-1989; US-330446.
                                                                                                                                                                                                                                                                                                                                                                                                          31-JAN-1989; US-304234.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50 eicadpkqkwvq 61
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                                                             50 eicadpkqkwvq 61
                                                                                           1 EICADPKOKWVQ 12
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                                                                                                                                                                                                                                                                                                               Modified_site
                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sense MCP-1
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Disclosure; Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (WARF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "Arg in the native sequence is replaced by Phe"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
Disclosure; Page 5; 42pp; English.

The sequences given in R53398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These monocyte chemotactic protein-1 (MCP-1) respectively. These oligonotic of the analyse of a protein of vascular restenosis. The treatment of vascular restenosis.

Radiolabelled antisense MCP-1 compounds may be constructed using high energy alpha or beta emitting isotopes rather than the gamma energy alpha or beta emitting isotopes rather than the gamma emitters cutomarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and proliferation of vascular cells is inhibited.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Monocyte chemotactic activating factor for use as wound remedy.
monocyte chemotactic activating factor; MCAF; wound remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 97; DB 14; Length 76;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 97; DB 10; Length 76;
Pred. No. 7.70e-03;
0; Mismatches 0; Indels
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Pollins B, Zhang YJ;

Proposed Part Received Tractant protein-1 (MCP-1) derivs. - are human moncoyte chemo-attractant protein-1 (MCP-1) derivs. - are radogenous MCP-1 and can be used to treat restenosis.

Prodogenous MCP-1 and can be used to treat restenosis.

Claim 5: Page 11: 22pp: English.

CC Amoncyte chemoattractant protein-1 (MCP-1) derivative are mutated such that they inhibit the moncyte chemoattractant activity of endogenous wCP-1, provided that the derivative has not been modified by the wCP-1, provided that the derivative has not been modified by the are: (1) substitution of 28 Tyr by an and/or (4) deletion of 24 Arg can (5) substitution of 28 Tyr by a specifically claimed human MCP-1 (5) substitution of 3-Asp by Ala: and/or (4) deletion of amino callular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC acids 2-8 The present sequence is a specifically claimed human MCP-1 (5) and cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

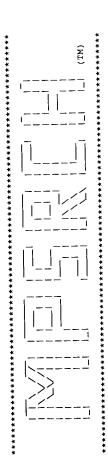
CC and cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC and cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC and cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC and cellular Biology, Noi. 9, Nov. 1989.

CC And cellular B
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fbsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Fri Feb 4 17:03:54 2000; MasPar time 2.71 Seconds 125.370 Million cell updates/sec Tabular output not generated.

Title: >US-09-150-813-38
Description: (1-12) from US09150813.pep
Perfect Score: 102

Sequence: 1 QVCIDPKLKWIQ 12 Scoring table: PAM 150 GAP 15

Searched: 77977 seqs, 28268293 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

Database: swiss-prot37

1:swissprot

Statistics: Mean 26.343; Variance 33.254; scale 0.792

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Pred. No.	4.02e-11	4.02e 11	3.89e-05	3.89e-05	3.89e-05	1.15e-04	1.96e-04	1.96e-04	1.96e-04	1.96e-04			5.65e-04	٠	9.55e-04	9.55e-04	1.61e-03	1.61e-03	1.61e-03	2.70e-03	2.70e-03	2.70e-03	
Description	STROMAL CELL-DERIVED F	STROMAL CELL-DERIVED F	KIN-8 PRECURS					MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	RECURSOR	EOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	FOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	SOR / ROSamorada Mixemor	FOIRVIN FRECUESCO
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ALIGNMENTS

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-!- FUNCTION: STIMULATES THE PROLIFERATION OF BONE MARROW-DERIVED B PROGENITOR CELLS IN THE PRESENCE OF IL-7 AS WELL AS GROWTH OF THE STROMAL CELL-DEPENDENT B-CELL CLONE DW34 CELLS.
-!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS, ALPHA (SHOWN HERE) AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOMURA M., NAKATA Y., UZAWA A., NOSE M., AKASHI M., SUZUKI G.;
NOMURA M., NEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
SIBNITIED (DEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES, BUT
                                          CIPER-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANOTATION UPDATE)
15-DEC-1998 (REL. 37, LAST ANOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH
STIMULATING FACTOR) (PBSF) (12-O-TETRADECANOYLPHORBOL 13-ACETATE
REPRESSED PROTEIN 1) (TPARI) (THYMIC LYMPHOMA CELL STIMULATING FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Molecular cloning of TPAR1, a gene whose expression is repressed by
the tumor promoter 12-0-tetradecanoylphorbol 13-acetate (TPA).";
EXP. CELL RES. 215:284-293(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                     TASHIRO K., TADA H., HEILKER R., SHIROZU M., NAKANO T., HONJO T.; "Signal sequence trap: a cloning strategy for secreted proteins and type I membrane proteins."; SCIENCE 261:600-603(1993).
                                                                                                                                                                                                                                                                                               NAGASAWA T., KIKUTANI H., KISHIMOTO T.; "Molecular cloning and structure of a pre-B-cell growth-stimulating
                                                                                                                                                                                              MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERLA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JIANG W., ZHOU P., KAHN S.M., TOMITA N., JOHNSON M.D., WEINSTEIN I.B.;
                                                                                                                                                                                                                                                                                                                                                       PROC. NATL. ACAD. SCI. U.S.A. 91:2305-2309(1994).
           89 AA.
             PRT;
               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NOT NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE; 93342488.
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                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                   94181581.
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JT 1
SDF1_MOUSE
                                                                                                                                                                   (TLSE).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration the between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its way non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
BETA; ARE PROBABLY GENERATED BY ALTERNATIVE SPLICING.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS; ALPHA AND BETA (SHOWN HERE); ARE GENERATED BY ALTERNATIVE SPLICING.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NISHIMURA Y., MIYAZAWA T., IKEDA Y., IZUMIYA Y., NAKAMURA K.,
CAI J.S., SATO E., KOHMOTO M., MIKAMI T.,
"Molecular cloning and sequencing of feline stromal cell-derived
factor-1 alpha and beta.";
EUR. J. IMMUNOGENET. 25:303-305(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                      CYTOKINE; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FELIS SILVESTRIS CATUS (CAT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; FELIDAE; FELIS.
                                                                                                                                                                                                                                                                                                                                                                                                                         STROMAL CELL-DERIVED FACTOR 1.
BY SIMILARITY.
BY SIMILARITY.
K -> KRLKM (IN FORM BETA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 102, DB 1; Length 89;
Pred. No. 4.02e-11;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                      PROSITE; PSO0471; SMALL_CYTOKINES_CXC; FALSE_NEG. PFAM; PF00048; 118; 1. HSSP; P48061; 2SDF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89 AA; 10032 MW;
                                     C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match
Local Similarity 100.0%;
                                                                                                                                                                                                     EMBL; D21072; G468457; -. EMBL; L12029; G393180; -.
                                                                                                                                                                                                                                   EMBL, L12030; G393182; EMBL, S74318; G786394; EMBL, D43804; G1304174; EMBL, D43805; G1304175; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                     PIR; A53497; A53497.
MGD; MGI:103556; SDF1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 QVCIDPKLKWIQ 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 98450506.
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062657;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS; ALPHA AND BETA (SHOWN HERE); ARE GENERATED BY ALTERNATIVE SPLICING.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OCFGCOPTO.",
PROC. NATL. ACAD. SCI. U.S.A. 95:6941-6946(1998).
-!- FUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES, BUT
NOT NEUTROPHILS.
                                                                                                                                                                                                                Gaps
       EMBL; ABO11966; D1029542; -. EMBL.CYTOKINES CXC; FALSE_NEG.
CYTOKINE; CROWATIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE SPLICING.
SIGNAL
CHAIN
20
93
STROMAL CELL-DERIVED FACTOR 1.
DISGULFID
32
71
BY SIMILARITY.
VARSPLIC
73
NA. 10581 MW; 4BB71366 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Solution structure and basis for functional activity of stromal cell-derived factor-1; dissociation of CXCR4 activation from binding
                                                                                                                                                                                                                                                                                                                                            01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
STROWAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Structure and chromosomal localization of the human stromal cell-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CRUMP M.P., GONG J.H., LOETSCHER P., RAJARATHNAM K., AMARA A.,
ARENZANA-SEISDEDOS F., VIRELIZIER J.L., BAGGIOLINI M., SYKES B.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEALWIS C., FERNANDEZ E.J., THOMPSON D.A., SIMON R.J., SIANI M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell-derived factor lalpha, a potent ligand for the HIV-1 'fusin'
                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTRARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Crystal structure of chemically synthesized [N33A] stromal
                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SHIROZU'M., NAKANO T., INAZAWA J., TASHIRO K., TADA H., SHINOHARA T., HONJO T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITIED (OCT-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                          Pred. No. 4.02e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X-RAY CRYSTALLOGRAPHY (2.2 ANGSTROMS) OF 22-88.
                                                                                                                                                                                                          0; Mismatches
 or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene.";
                                                                                                                                                             Query Match
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                      STIMULATING FACTOR) (PBSF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [3]
STRUCTURE BY NMR OF 22-88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBO J. 16:6996-7007(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       derived factor 1 (SDF1) ge
GENOMICS 28:495-500(1995).
                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and inhibition of HIV-1
                                                                                                                                                                                                                                69 QVCIDPKLKWIQ 80
                                                                                                                                                                                                                                                  1 QVCIDPKLKWIO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                      JT 3
SDF1_HUMAN
                                                                                                                                                                                                                                                                                                                                P48061;
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the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; MITAZOÅ; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; CAPRINAE; OVIS.
                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEGASTELOIS I., GREENLAND T., ARNAUD P., MORNEX J.F., CORDIER G.; "Sequencing of the ovine interleukin-8-encoding cDNA using the polymerase chain reaction.";
                                                                                                                                                                                               CYTOKINE; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE SPLICING;
                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                          STROMAL CELL-DERIVED FACTOR 1.
                                                                                                                                                                                                                                                                                                                           DB 1; Length 93;
                                                                                                                                                                                                                                                                                                                             Score 102; DB 1; Length 93; Pred. No. 4.02e-11; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                90 93 MISSING (IN FORM ALPHA)
93 AA; 10666 MW; 4B9911C7 CRC32;
                                                                                                                                                                      PROSITE; PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-1994 (REL. 29, CREATED)
01-JUN-1994 (REL. 29, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                               POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                             100.0%;
Local Similarity 100.0%;
les 12; Conservative
                                                                                        EMBL; U16752; G571508; -. EMBL; L36033; G1220366; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENE 150:367-369(1994).
                                                                                                                1SDF; 28-JAN-98.
2SDF; 17-JUN-98.
1A15; 12-AUG-98.
600835; -
                                                                                                                                                                                                                                19
93
71
                                                                                                                                                                                                                                                                                                                                                                                     69 QVCIDPKLKWIQ 80
                                                                                                                                                                                                                                                                                                                                                                                                  1 QVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OVIS ARIES (SHEEP).
                                                                                                                                                                                         PFAM; PF00048; 118;
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                                                                                                                                                                                                                    3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IL8_SHEEP
P36925;
                                                                                                                                                                                                                                                              DISULFID
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CHANG Y.-F., SUMMERS B.A., ERB H.N., APPEL M.J.;
"Borrelia burgdorferi migrates into joint capsules and causes an upregulation of interleukin-8 in synovial membranes of dogs experimentally infected with ticks.";
INFECT. IMMUN 65:1273-1285(1997).
-1- FUNCTION: IL-8 IS A CHEMOTANCTIC FACTOR THAT ATTRACTS NEUTROPHILS, IS A CHEMOTANDE TO MONCOYTES. IT IS ALSO INVOLVED IN BASOPHILS, AND T-CELLS, BUT NOT MONCOYTES. IT IS ALSO INVOLVED IN RESPONSE TO AN INFLAMMATORY STIMULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-MONGREL; TISSUE-JUGULAR VEIN;
MEDLINE; 95114148.
MEDLINE; 95114148.
MENTH W.C., LAROSA G.J., MANNING A.M.,
MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,
MICHAEL L.H., ROT A., ENPWAN M.L.;
"Interleukin-8 gene induction in the myocardium after ischemia and
reperfusion in vivo.";
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 94010328.
ISHIKAWA J., SUZUKI S., HOTTA K., HIROTA Y., MIZUNO S., SUZUKI K.; Cloning of a canine gene homologous to the human interleukin-8 encoding gene."; GENE 131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T., GOLISUKA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA K., ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.;
"MOLECULAR Cloning and expression of canine interleukin 8 cDNA.";
                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS
                                                                                                                                                                                                                                                                                                                                            Score 78; DB 1; Length 101;
Pred. No. 3.89e-05;
3; Mismatches 1; Indels
                                                                                                                                                                   CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                           34 61 BY SIMILARITY.
36 77 BY SIMILARITY.
101 AA; 11292 MW; 5A574527 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101 AA.
                                                                                                                                                                                               BY SIMILARITY.
INTERLEUKIN-8.
EMBL; X78306; G463254; -.
EMBL; S74436; G786591; -.
PIR; S42496; S44496.
PPRSJIE; PS00471; SMALL_CYTOKINES_CXC; 1.
PPRM; PF00048; 118; 1.
HSSP; P10145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLIN. INVEST. 95:89-103(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                             76.5%;
                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                  8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                  22
101
61
77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75 EVCLDPKEKWVQ 86
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1 QVCIDPKLKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 97230298.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
TISSUE=LYMPH NODE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 94010328.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 95127913
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IL8_CANFA
P41324;
                                                                                                                                                                                                                                   CHAIN
DISULFID
                                                                                                                                                                                                                                                                                                           SEQUENCE
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Matches
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                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-Y-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                               118_PIG
P26894; P22951;
01-AUG-1991 (REL. 19, CREATED)
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Molecular cloning of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porcine IL-8 and another intercrine-alpha protein."; BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 93041741.
GOODMAN R.B., FOSTER D.C., MATHEWES S.L., OSBORN S.G., KUIJPER J.L.,
FORSTROM J.W., MARTIN T.R.;
                                                                                                                                                                                                                                                                                                                                   ,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUS SCROFA (PIG).
EURARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 94103307.

MEDLINE; 94103307.

WELS D.J., MURTAGEM.P.,

"Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.",

"BIOL. CHEM. 269:77-85(1994).
                                                                                                                                                                                                                                                                                                         Score 78; DB 1; Length 101;
Pred. No. 3.89e-05;
                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED (JUL-1991) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GODDMAN R.B.;
SUBMITTED (MAR-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                     BY SIMILARITY.
INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
N; 7C49D62D CRC32;
                                                                                                                                                                                                                                                                                                                             3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS
                                                                                                                                                                                      PROSITE; PS00471; SNALL_CYTOKINES_CXC; 1. PFAM; PF00048; i18; 1. HSSP; P10145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A., AND SEQUENCE OF 26-45.
                                                                                                                                                                                                                                                                                 101 AA; 11280 MW;
                                                                                                                                                                                                                                                                                                       76.5%;
                                                                                                                                          EMBL; D28772; G517100; -.
                                                                                                                                                               EMBL; U10308; G607814; -. EMBL; AF048717; G2935472;
                                                                                                                                                                                                                                                                                                                              8; Conservative
                                                                                                                                                     D14285; G475152; -
                                                                                                                                                                                                                                                                                                                                                 75 EVCLDPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                      1 QVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                               SEQUENCE
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0
                                                                                                                                                                                                                                    -i-TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES.
-i-INDUCTION: BY LIPOPOLYSACCHARIDE.
-i-SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                               porcine alveolar macrophages."

J. BALOL. CHEM. 266:18455-8463(1991).

-1- FUNCTION: IL-8 IS A CHEMOACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
RESPONSE TO AN INFLAMMATORY STIMULUS.

-1- SUBUNIT: HOMODIMER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YOSHIMURA T., JOHNSON D.G., "CDNA cloning and expression of guinea pig neutrophil attractant protein-1 (NAP-1). NAP-1 is highly conserved in guinea pig.", J. IMMUNOL. 151:6225-6236(1993).
                                                         GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.; "Identification of two neutrophil chemotactic peptides produced by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT PROTEIN 1)
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 78; DB 1; Length 103;
Pred. No. 3.89e-05;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY
BY SIMILARITY
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (REL. 34, LAST SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT; 101 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INTERLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE: PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM: PF00048; 118; 1.
HSSP; P10145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1L8_CAVPO STANDARD; P P49113; 01-FEB-1996 (REL. 33, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103 AA; 11633 MW;
                                                                                                                                                                                                                                                                                                  C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M86923; G164521; -.
EMBL; X61151; G516197; -.
EMBL; M99367; G1235612; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76.5%;
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61
77
34
87
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PIR; A39819; A39819.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 QVCIDPKLKWIQ 12
SEQUENCE OF 26-45.
                     STRAIN=YORKSHIRE;
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MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-40N-1990 (REL. 13, LAST REQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ADD ACTIVATING FACTOR) (MONOCYTE SECRETORY PROTEIN JE)
AND ACTIVATING FACTOR) (MCAP) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN SERSPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
SUBUNIT: HOMODIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FURUTANI Y., NOMURA H., NOTAKE M., OYAWADA Y., FUKUI T., YAWADA M., LARGEN C.G., OPPENHEIM J.J., MATSUSHIMA K.; "Cloning and sequencing of the cDNA for human monocyte chemotactic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ROLLINS B.J., STIER P., ERNST T., WONG G.G.; "The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO SALIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                              Length 101;
                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                               ASSE, FLOATS, THELAMMATORY RESPONSE, SIGNAL. SIGNAL. 1 22 BY SIMILARITY. SIGNAL 23 101 INTERLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and activating factor (MCAF).";
BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989)
                                                                                                                                                                                                                                                                                                               Score 76; DB 1; Le
Pred. No. 1.15e-04;
3; Mismatches 1;
                                                                                                                                                                                                                                                                BY SIMILARITY.
BY SIMILARITY.
E13FB521 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                  99 AA
                                                                                                                                                                                             PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
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MOL. CELL. BIOL. 9:4687-4695(1989).
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                                                                                                                                                                                                                                                                   34 61 B
36 77 B
101 AA; 11414 MW;
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                                                              C-X-C) (CHEMOKINE CXC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
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                                                                                                                                                                                                         PFAM; PF00048; 118; 1.
HSSP; P10145; 11KL.
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P13500;
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MEDLINE; 96195223.
WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.; WEBER M., UGUCCIONI M., BAGGIOLINI M. CLARK-LEWIS I., DAHINDEN C.A.; "Deletion of the NH2-terminal residue converts monocyte chemotactic "profetion of the NH2-terminal residue converts monocyte chemotactic profession in from an activator of basophil mediator release to an eosinophil chemoattractant.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HANDEL T.M., DOMAILLE P.J.;
HARDEL T.M., DOMAILLE P.J.;
Heteronuclear (1H, 13C, 15N) NMR assignments and solution structure
of the monocyte chemoattractant protein-1 (MCP-1) dimer.";
BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LUBKOWSKI J., BUJACZ G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.;
"The structure of MCP-1 in two crystal forms provides a rare example
of variable quaternary interactions.";
NAT. STRUCT. BIOL. 4:64-69(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA S., GRIFFIN P.R., SHABANOWITZ J., HUNT D.F., APPELLA E.; "Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions."; proc. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DECOCK B., CONINGS R., LENAERTS J.-P., BILIAU A., VAN DAMME J.; "Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GRONENBORN A.M., CLORE G.M.; Modeling the three-dimensional structure of the monocyte chemo-attractant and activating protein MCAF/MCP-1 on the basis of the solution structure of interleukin-8."; PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "The expression of monocyte chemotactic protein (MCP-1) in human
                                                                                                                                                                                                                                                                                                  CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.; "Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family."; INT. IMMUNOL. 1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 94150478.
LI Y.S., SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F.,
KOLATTUKUDY P.E.;
                                                 SHYY Y.J., LI Y.S., KOLATTUKUDY P.E.; "Structure of human monocyte chemotactic protein gene and its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YOSHIMURA T., LEONARD E.J.; "Human monocyte chemoattractant protein-1 (MCP-1)."; ADV. EXP. MED. BIOL. 305:47-56(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM, BIOPHYS, RES. COMMUN. 167:904-909(1990).
                                                                                                                                                            BIOCHEM. BIOPHYS. RES. COMMUN. 169:346-351(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vascular endothelium in vitro and in vivo.";
MOL. CELL. BIOCHEM. 126:61-68(1993).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
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                                                                                                                                                 requlation by TPA.";
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SEQUENCE FROM N.A. MEDLINE; 90290466.
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                                                                                                                                                                         SUBUNT: MONOMER OR HOMODINER; IN EQUILIBRIUM.
PTH, PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.
STMILABLIX: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTORINE C-C) (CHEMOKINE CC).
                                  MEDLINE; 94253189.
ZHANG Y.J., RULLEDGE B.J., ROLLINS B.J.;
ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
SITUCTURE/activity analysis of human monocyte chemoattractant
protein-1 (MCP-1) by mutagenesis. Identification of a mutated protein
that inhibits MCP-1-mediated monocyte chemotaxis.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                               KIM K.S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
"Structural characterization of a monomeric chemokine: monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MISSING: LOSS OF ACTIVITY.
MISSING: LOSS OF ACTIVITY.
MISSING: 90% REDUCTION IN ACTIVITY.
MISSING: 83% REDUCTION IN ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID.
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EMBL; M30816; G386961; JOINED.
EMBL; M31625; G386961; JOINED.
EMBL; M24545; G307163; --
EMBL; M24245; G338009; --
EMBL; X14768; G34514; --
J. EXP. MED. 183:681-685(1996)
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M28225; G338007; -
M28223; G338007; JOINED.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M28224; G338007; JOIN
S69738; G545465;
S71513; G240868; -...
A17786; G641145; -...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PFAM; PF00048; 118; 1. CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1DOM; 14-OCT-96.
1DON; 14-OCT-96.
1MCA; 15-OCT-94.
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                                                                                                                                         MEDLINE; 97053697
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                                                                                                                           SUBUNIT.
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DISULFID
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MUTAGEN
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EMBL;
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PIR;
PDB;
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PDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAN BIND HEPARIN.
-1- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                           BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                      Y->5: LOSS OF ACTIVITY.
R->1: LOSS OF ACTIVITY.
D->1: 90% REDUCTION IN ACTIVITY.
5355B695 CRC32;
         IN ACTIVITY
IN ACTIVITY
                                 REDUCTION IN ACTIVITY REDUCTION IN ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                               15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                2; Indels
                                                                                                                         Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 75; DB 1; Length 99;
Pred. No. 1.96e-04;
2; Mismatches 2; Indels
                    REDUCTION REDUCTION
                                                                                                                   Score 75; DB 1; LA
Pred. No. 1.96e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
9BA2CD26 CRC32;
                                                                                                                                               3; Mismatches
                                                                                                                                                                                                                                                  99 AA.
                                                                                                                                                                                                                                                                                    LAST SEQUENCE UPDATE)
                  N->A: 50% I
R->F: 95% I
S->Q: 40% I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PS00472; SMALL_CYTOKINES_CC; 1.
      D->A:
N->A:
                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                 01-NOV-1995 (REL. 32, CREATED)
                                                                                          11025 MW;
                                                                                                                    73.5%;
58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99 AA; 10900 MW;
                                                                                                                                            7; Conservative
                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; S67954; E118856; -.
EMBL; S67956; G544997; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                  (REL. 32,
(REL. 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
                                                                                                                                                                  73 EICADPKQKWVQ 84
                                                                                                                                                                                 1:| ||| ||:|
1 QVCIDPKLKWIQ 12
                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 DVCADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99 AA;
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 94114084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                  SCYA8 OR MCP2
                                                                                                                                                                                                                                LT 9
MCP2_BOVIN
Q09141;
                                                                                                                                                                                                                                                                                 01-NOV-1995
                                                                                                                                                                                                                                                                                          15-JUL-1998
                                                              MUTAGEN
MUTAGEN
SEQUENCE
MUTAGEN
MUTAGEN
MUTAGEN
                                     MUTAGEN
MUTAGEN
                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A.,
LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,
ROSSEN R.D., SMITH C.W., ENTWAN M.L.;
                                                                                                                                                   Gaps
                                                                             BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó.
                                                                                                                                 MORSEY M.A., POPOWYCH Y., KOWALSKI J., GERLACH G., GODSON D., CAMPOS M., BABIUK L.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-0CT-1999 (REL. 34, LAST ANNOTATION UPDATE)
MONOCYTE CHEMORACIIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
CHEMORATRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 75; DB 1; Length 101; Pred. No. 1.96e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                34 61 BY SIMILARITY.
36 77 BY SIMILARITY.
101 Aa; 11291 MW; 0E390526 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Mismatches
                                  01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY.
INTERLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                      PROSITE; PSO0471; SMALL_CYTOKINES_CXC; 1.
PFAM: PF00048; il8; 1.
HSSP; P10145; lIKL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-JUGULAR VEIN ENDOTHELIAL; MEDLINE; 97176620.
                                                              INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                          73.5%;
                                                                                                                                                                                                                                     C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                   EMBL; S82598; G1699354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCYA2 OR MCP1.
CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                 22
101
61
                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :||::|| ||:|
1 QVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75 EVCLNPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                96304552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCP1_CANFA
                                                        01-NOV-1997
                   IL8_BOVIN
P79255;
                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                         SECUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                        -- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR VEINS, AND INTLIRATING LEUROCYTES.
--- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;
"Porcine luteal cells express monocyte chemoattractant protein-1
"Porcine luteal cells express chain reaction and cDNA cloning.";
(MCP-1): analysis by polymerase chain reaction and cDNA cloning.";
BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                         -i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERPOSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM.
"Induction of monocyte chemoattractant protein-1 in the small veins of the ischemic and reperfused canine myocardium."; CIRCULATION 95:693-700(1997).
                                                                                                                                                                                                                            -i- SUBGNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-i- INDUCTION: BY TNF-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 75; DB 1; Length 101; Pred. No. 1.96e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
7 A7075B14 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995 (REL. 32, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 34 59 B
35 75 B
101 AA; 11121 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U29653; G1144186; -
                                                                                                                                                                                                                                                                                                                                                                              C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 OVCIDPKLKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUS SCROFA (PIG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=BRAIN;
ZACH O.R.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCP1_PIG
P42831;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL
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                                                                                                                   STRAIN-C57BL/65; TISSUE-LUNG; MEDIAN OF COXLE A.J., JIA G.-Q., AGUIRRE V., FRIEND D., COXLE A.J., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., KOPF M., GOTIERERZ-RAWOS J.-C.; Mouse ectaxin expression parallels ecsinophil accumulation during lung allergic inflammation but it is not restricted to a Th2-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROTHERNERG M.E., LUSTER A.D., LEDER P., "Murine ectaxin: an eosinophil chemoattractant inducible in endothelial calls and in interleukin 4-induced tumor suppression."; PROC. NATL. ACAD. SCI. U.S.A. 92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                      BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                             Score 74; DB 1; Length 99;
Pred. No. 3.33e-04;
4; Mismatches 2; Indels
                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                            BY SIMILARITY.
BY SIMILARITY.
ECC3AFB4 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 97 AA.
                                                                                                                                              PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1. HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                 SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                 99 AA; 10976 MW;
                                                                                                                                                                                                                                                                                                             Match 72.5%;
Local Similarity 50.0%;
                                                                                                                      EMBL; Z48479; G683717; -. EMBL; X79416; G872313; -.
                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                            73 EICAEPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                             1:| :|| ||:|
1 QVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IMMUNITY 4:1-14(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=LUNG;
MEDLINE; 96004658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [2]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                         EOTA_MOUSE
P48298;
                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                             MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHÖRDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                    Score 73; DB 1; Length 97;
                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                        EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBMITTED (DEC-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PS7545, 008780; 15-JUL-1998 (REL. 36, CREATED) 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE) EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALJ
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                Pred. No. 5.65e-04;
3; Mismatches 2
                                                                                                                                                                                                                                                                                           F85A96BC CRC32;
                                                                                                                                                                                                                                                      EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                         POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                     97 AA; 10893 MW;
                                                                                                                             EMBL; U26426; G995911; --
EMBL; U40672; G1113937; --
MGD; MGI:103576; SCYA11.
                                                                                                                                                                                                                                                                                                                  Match
Local Similarity 58.3%;
                                                                                                                                                                                                                                                                                                                                             7; Conservative
 C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-C) (CHEMOKINE CC).
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                                                                                                                                                                                PFAM; PF00048; i18; 1.
HSSP; P80098; INCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                71 EICADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                 1 OVCIDPKLKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                              DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N., LAVIGNE F., HAMID Q., MURRHY P.M., LUSTER A.D.;
"Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3.";
J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDILINE; 97341179.

BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N.,

APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J.,

SCHMIDT D.B., IMBURGIA C., MACNUITY D., MATTHEWS J., O'DONNELL K.,

O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.;

"Cloning, in vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine recentor 2R ".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-LUNG;
POWER C.A., MEYER A., RISON S.C.G., GUYE-COULIN F., WELLS T.N.C.;
                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUGARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                      15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
CHEMOATTRACTANT PROTEIN 4) (CK-BETAID) (NCC-1).
                                                                                                                                                                                               2; Indels
                                                                                                                                                                Length 97;
HSSP; P80098; INCV.
EOSINOPHIL: CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                Score 73; DB 1; Losted. No. 5.65e-04; 3; Mismatches 2,
                                                                                                                   05B4ED45 CRC32;
                                                                                                                                                                                                                                                                                                                             98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
                                                                          BY SIMILARITY.
BY SIMILARITY.
                                                                                                         POTENTIAL.
                                              POTENTIAL.
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                                                                                                                                                                     Score 73;
                                                                                                                                                                                       Pred.
                                                                                                                                                                                                                                                                                                                                                            5-JUL-1998 (REL. 36, CREATED)
                                                                                                                          3 3
97 AA; 10851 MW;
                                                                                                                                                                        71.68;
                                                                                                                                                                                                      7; Conservative
                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                      SCYA13 OR MCP4 OR NCC1.
                               INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                    71 EICADPKKKWVQ 82
                                                                                                                                                                                                                                                              1 QVCIDPKLKWIO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                          HOMO SAPIENS (HUMAN)
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                                                                                                                                                                                                                                                                                                                                  MCP4_HUMAN
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Search completed: Fri Feb 4 17:04:05 2000

Job time : 11 secs.

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                                                                                                     SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

1. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
1. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
CCR2B AND ECR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMILATION OF
LEGNCOYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MONOCYTE CHEMOTACTIC PROTEIN 4.
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 98;
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Pred. No. 5.65e-04;
3; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL.
DF52F6EC CRC32;
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PFAM; PF00048; 118; 1.
HSSP; P13500; 1D0L.
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10986 MW;
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58.3%;
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L; X98306; E248571;
                                                                                                                                                                                                                                                                                       C-C) (CHEMOKINE CC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
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***************************************	(ME)	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd	protein - protein database search, using Smith-Waterman algorithm	Feb 4 17:03:15 2000; MasPar time 3.60 Seconds 133.382 Million cell updates/sec	nerated.	>US-09-150-813-38 (1-12) from US09150813.pep 102 1 QVCIDPKLKWIQ 12	150 15	110 seqs, 40068593 residues	imum Match 0% Ling first 45 summaries	pir60 1:pir1 2:pir2 3:pir3 4:pir4	n 25.707; Variance 37.444; scale 0.687	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
*******		e 3.1A John F. Coll: ght (c) 1993-1998 (Distribution righ'	ein - protein datab	Fri Feb 4 17:03:1	ot generated.	>US-09-150-813-38 (1-12) from US0915 102 1 QVCIDPKLKWIQ 12	PAM 150 Gap 15	122810 seqs, 40068	Minimum Match Listing first	pir60 1:pir1 2:pir2 3	Mean 25.707; Var.	No. is the number of r greater than or equal s derived by analysis o
***************************************	\ <u>\</u>	Releas	MPsrch_pp prot	Run on:	Tabular output not generated	Title: Description: Perfect Score: Sequence:	Scoring table:	Searched:	Post-processing:	Database:	Statistics:	Pred. No. score gree and is der

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SUMMARIES

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66.7 109 2 2 6 64.7 999 2 2 6 64.7 999 2 2 6 64.7 999 2 2 8 61.8 92 2 1 3 61.8 92 2 1 3 61.8 92 2 1 3 61.8 92 2 2 3 61.8 92 2 2 3 61.8 92 2 2 3 61.8 92 2 2 3 61.8 92 2 2 3 61.8 103 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		ALIGNA	ype comp homolog Mus sp.	tou, P.; I.B. s. (1994 oning of by the t (TPA).	ary; abel 4318;	#molecu]	υ, μ		ttype co growth-s mus mus mus mus sequen 582 .; Kikut Acad. S loning s imulatir
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Tashiro, K.; Tada, H.; Heilker, R.; Shirozu, M.; Nakano, T.;
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                                                      ##cross references GB:D21072; NID:9413905; PID:d1005177; PID:9468457
                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G01540 #type complete
cytokine SDF-1-beta - human
#formal_name Homo sapiens #common_name man
21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change
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                                                                                                                              #journal Science (1993) 261:600-603
#title Signal sequence trap: a cloning strategy for secreted proteins and type I membrane proteins.
#cross.references MUID:93342488
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#title Signal sequence trap: a cloning strategy for secreted proteins and type I membrane proteins.
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                                                                                                                                                                                                                                                                                                                                  cytokine
#length 89 #molecular-weight 10032 #checksum 4622
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# #Length 93 #molecular-weight 10666 #checksum 6309
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                                                                                                                                                                                                                         ##status
##molecule_type mRNA
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Nucleotide sequence of ovine interleukin 8 cDNA using
                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                       #formal_name Canis lupus familiaris #common_name dog
19-May-1994 #sequence_revision 19-May-1994 #text_change
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#formal_name Ovis orientalis aries, Ovis ammon aries
#common_name domestic sheep
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
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#length 93 #molecular-weight 10561 #checksum 5309
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#superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611 #checksum 3157
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                                                                                                   Score 102; DB 2; Length 93;
Pred. No. 2.50e-09;
0; Mismatches 0; Indels
##residues 1-93 ##label RES
##Cross-references GB:L12030; NID:g393181; PID:g393182
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Best Local Similarity 66.7%; Pred. No. 4.52e-04;
Matches 8; Conservative 3; Mismatches 1; Indels
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Pred. No. 4.52e-04;
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##molecule_type mRNA; protein
##residues 1-103 ##label GOO
##experimental_source alveolar macrophage
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#cross-references MUID:94065176
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#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #text_change
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Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
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#formal_name_Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
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FICATION #superfamily beta-thromboglobulin #shereksum 8835
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#length 101 #molecular-weight 11292 #checksum 294
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Matches 8; Conservative 3; Mismatches 1;
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Local Similarity 66.7%; Pred. No. 4.52e-04;
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Yoshimura, T.; Johnson, D.G.
J. Immunol. (1993) 151.6225-6236
CDNA cLoning and expression of guinea pig neutrophil
attractant protein-1 (NAP-1): NAP-1 is highly conserved in
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                                                                                                                                             #authors Goodman, R.B.; Foster, D.C.; Mathewes, S.L.; Osborn, S.G.; #authors Kuijper, J.L.; Porstrom, J.W.; Martin, T.R.
#journal Biochemistry (1992) 31:10483-10490
#title Molecular cloubing of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porcine IL-8 and another intercrine-alpha protein.
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#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
23-Feb-1996
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Neutrophil attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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#length 101 #molecular-weight 11414 #checksum 2363
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#length 103 #molecular-weight 11677 #checksum 8904
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Pred. No. 1.17e-03;
3; Mismatches 1; Indels
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3; Mismatches 1; Indels
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Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a monocyte secretory
                                                                         Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
Biochem. Biophys. Res. Commun. (1990) 169:346-351
Structure of human monocyte chemotactic protein gene and its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. (1989) 244:487-493
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            A35474; A33476; S03339; I51841; A60299; A32300; A32396;
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PID:g386961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Yoshimura, T.; Leonard, E.J.
#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
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                                  A34561; I57488; JC1096
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##residues 1-99 ##label SHY
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#cross-references MUID:90290466
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#cross references MUID:89153605
#accession S03339
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20-Mar-1998
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#journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel *cross-references WUID:90211336
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J.F.; Kolattukudy, P.E.
#journal Mol. Cell. Biochem. (1993) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1) in
#cross_references MUID:94150478
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                 Fobinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.; Appella, E. Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1850-1854 Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune
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monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
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#modified_site pyrrolidone carboxylic acid (Gln) (in
#blinding_site carbohydrate (Asn) (covalent) #status
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#length 99 #molecular-weight 11025 #checksum 7984
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Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte
Chemoattractant protein-1 (MCP-1) gene.
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3; Mismatches 2; Indels
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#cross-references GB:S69738; NID:g545464; PID:g545465
ACE JC1096
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##residues 24-28,'Q',30-99 ##label YEQ
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es 7; Conservative
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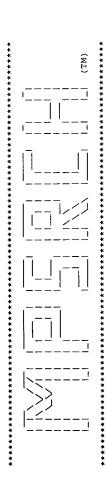
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03-May-1996
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#product monocyte chemoattractant protein-1 #status
predicted #label MAT\
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                                                                       Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.;
                                                                                                    Biochem. Biophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant
protein_1 (MCP-1): Analysis by polymerase chain reaction
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   neutrophil attractant/activation protein-1 #formal_name Oryctolagus cuniculus #common_name Oryctolagus
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       30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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#length 99 #molecular-weight 10976 #checksum 9768
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ICATION #superfamily macrophage inflammatory protein
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submitted to the EMBL Data Library, July 1994
$57498
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Pred. No. 3.00e-03;
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JC2336 #type complete monocyte chemoattractant protein-1 - bovine monocyte chemoattractant protein-1 - bovine #common_name zebu cattle #formal_name Bos primigenius indicus #common_name zebu cattle 20-Feb-1995 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #authors Yoshimura, T.; Yuhki, N. #authors Toshimura, T.; Yuhki, N. #journal J. Immunol. (1991) 146:3483-3488 #iitle Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells. #cross_references MUD:91225489
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23-33,'X',35,'X',37-46,'X',48-49,'I',51-53 ##label BEA #superfamily beta-thromboglobulin
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
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#superfamily macrophage inflammatory protein
#length 99 #molecular-weight 11114 #checksum 9401
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Pred. No. 7.60e-03;
4; Mismatches 1:
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##mosidnes 1-99 ##label WEM
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::| ||| ||:| 1 QVCIDPKLKWIQ 12 Qy

Search completed: Fri Feb 4 17:03:37 2000 Job time: 22 secs.



Release 3.1A John F. Collins, Biocomputing Research Unit. U.K. Copyright (c) 1993-1998 University of Edinburgh, U. Distribution rights by Oxford Molecular Ltd protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:02:38 2000; MasPar time 3.51 Seconds 72.732 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-38 (1-12) from US09150813.pep 102 Description: Perfect Score: Title:

QVCIDPKLKWIQ 12 PAM 150 Gap 15 Scoring table: Sequence:

170751 seqs, 21266608 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

a-geneseq35 Database:

| jpart1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part11 18:part18 20:part20 22:part20 22:part20 22:part20 22:part20 22:part20 22:part20 23:part20 23:part30 23:

Mean 19.335; Variance 66.726; scale 0.290 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Description	Peptide which binds to bentide which binds to	Peptide which binds t	Peptide which binds t	Human SDF-1-alpha.	Peptide #1.	Protein encoded by cD	Peptide #2.	Human SDF-1 which is	Human SDF-1-beta.	Human chemokine SDF-1	Human chemokine SDF-1	Human MCF precursor.	Monocyte chemoattract	Monocyte chemoattract	Monocyte chemoattract
Ð	W50760	W50762	W50763	R75419	W50764	R70994	W50765	W50766	R75420	W76221	W76220	R06398	W13598	W13599	W13597
DB	31	31	31	13	31	12	31	31	13	35	35	~	24	24	24
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Monocyte chemoattract des(2-8) MCP-1. Macrophage chemoattra Monocyte chemotactic MCF. (24-Arg) MCP-1. Mature human monocyte MCP-1. (28-Asp) MCP-1. (28-Asp) MCP-1. (28-Asp) MCP-1. Mature MCP-1. Chemoattractant prote Human monocyte chemoattractant prote Human monocyte chemo-MCF. Human monocyte chemoatra Chemokine McF. Droll3+ chemokine betal Chemokine McF. Droll72 chemokine betal Chemokine McT. Human chemokine betal Human chemokine betal Bac 2 chemokine betal Bac 1 chemokine betal Human chemokine betal	
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ALIGNMENTS

Human strongal cell-derived chemokine, SDF-1 - useful for treating
human strongal cell-derived chemokine, SDF-1 - useful for treating
human immunodeficiency virus infection

Claim 2; Page 29; 48pp; French.

The invention relates to peptides which bind to a cellular receptor for
CXC chemokines in namely the CXCX4 receptor (also known as leukocyteexpressed transmembrane domain receptor), especially where the
peptide is human chemokine SDF-1. The peptide can be used to treat or
prevent HIV infections, optionally together with reverse transcriptase
inhibitors, viral protease inhibitors, soluble CD4 receptors, CD4
receptor antagonists, immunotherapy agents, agents for treating HIVassociated opportunistic infections and/or other CXC or Cc chemokines,
especially RANTES, MIP1- alpha, MIP1- beta or MCP1. The peptide can be
used to detect anti-SDF-1 antibodies in biological fluids. This
sequence represents a specifically claimed peptide which binds to the ö W50760; 27-JUL-1998 (first entry) Peptide which binds to CXCR4 receptor and is useful for treating HIV. Stromal cell-derived chemokine; SDF-1; human immunodeficiency virus; HIV; CXCR4 receptor; leukocyte-expressed transmembrane domain receptor. Homo sapiens. FR2751658-A1. Gaps ö 30-JAN 1998. 26-JUL-1996; 009477. 26-JUL-1996; FR-0009477. (INSP) INST PASTEUR. Arenzana SF, Baggiolini M, Clark LI, Moser B, Virelizier JL; WPI; 98-123039/12. Score 102; DB 31; Length 67; Pred. No. 2.78e-03; 0; Mismatches 0; Indels л 1 W50760 standard; peptide; 67 AA. 100.0%; Query Match Best Local Similarity 100.0%; 67 AA; CXCR4 receptor Sequence

Conservative 1 QVCIDPKLKWIQ 12 48 qvcidpklkwig 59 Matches g

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Human strongal cell-derived chemokine, SDF-1 - useful for treating human strongal cell-derived chemokine, SDF-1 - useful for treating claim 5; Page 29; 48pp; French.

The invention relates to peptides which bind to a cellular receptor for expressed transmembrane domain receptor (also known as leukoyte-corp. The invention relates to peptide such as leukoyte-corp. The invention chemokine SDF-1. The peptide can be used to treat or prevent HIV infections, optionally together with reverse transcriptase inhibitors, viral protease inhibitors, soluble CD4 receptors, CD4 associated opportunistic infections and/or other CXC or CC chemokines, especially RANTES, MIPI- alpha, MIPI- beta or MCPI. The peptide can be sequence represents a specifically claimed peptide which binds to the
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WPI: 98-123039/12.

WPI: 98-123039/12.

WPI: 98-123039/12.

WPI: 98-123039/12.

Human stronal cell-derived chemokine, SDF-1 - useful for treating human immunodeficiency virus infection

PS Claim 5; Page 29; 48pp; French.

CX Chemokines, namely the CXCR4 receptor (also known as leukocyterory chemokines, namely the CXCR4 receptor; especially where the expressed transmembrane domain receptor), especially where the peptide is human chemokine SDF-1. The peptide can be used to treat or prevent HIV infections, optionally together with reverse transcriptase inhibitors, viral protease inhibitors, soluble CD4 receptors, CD4 associated opportunistic infections and/or other CXC or CC chemokines, especially RANTES, MIPI- alpha, MIPI- beta or MCPI. The peptide can be sequence represents a specifically claimed peptide which binds to the contraction and contractions and contractions in the contraction of 
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                                                                  W30761;
27-JUL-1998 (first entry)
Peptide which binds to CXCR4 receptor and is useful for treating HIV.
Stromal cell-derived chemokine; SDF-1; human immunodeficiency virus;
HIV; CXCR4 receptor; leukocyte-expressed transmembrane domain receptor.
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Peptide which binds to CXCR4 receptor and is useful for treating HIV.
Stromal cell-derived chemokine; SDF-1; human immunodeficiency virus;
HIV; CXCR4 receptor; leukocyte-expressed transmembrane domain receptor.
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Pred. No. 2.78e-03;
0; Mismatches 0; Indels
                                   W50761 standard; peptide; 68 AA.
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W50762 standard; peptide; 72 AA.
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26-JUL-1996; FR-009477.
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26-JUL-1996; 009477.
26-JUL-1996; FR-009477.
(INSP ) INST PASTEUR.
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                         human immunodeficiency virus infection
Claim 5; Page 29; 48pp; French.
CC chemokines, namely the CXCR4 receptor (also known as leukocyte-expressed transmembrae domain receptor), especially where the peptide is human chemokine SDF-1. The peptide can be used to treat or prevent HIV infections, optionally together with reverse transcriptase inhibitors, viral protease inhibitors, soluble CD4 receptors, CD4 associated opportunistic infections and/or other CXC or CC chemokines, especially RANTES, MIP1- alpha, MIP1- beta or MCP1. The peptide can be used to detect anti-SDF-1 antibodies in biological fluids. This
                                                                                                                                                                                                               27-JUL-1998 (first entry)
Peptide which binds to CXCR4 receptor and is useful for treating HIV.
Stromal cell-derived chemokine; SDF-1; human immunodeficiency virus;
HIV; CXCR4 receptor; leukocyte-expressed transmembrane domain receptor.
                                                Gaps
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15-APR-1995.
12-OCT-1994, 117953.
14-OCT-1993; JP-280505.
(ONOY ) ONO PHARM CO LTD.
HOID T, Shirozu M, Tada H;
WPI; 95-207311/28.
WPIS 95-207311/28.
Polypeptide(s) used for treating diseases relating to undergrown or abnormal proliferation of haematopoietic cells - e.g. inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                  FR2751658-AL.
26-JUL-1996; 009477.
26-JUL-1996; FR-009477.
26-JUL-1996; FR-009477.
Arenzana SF, Baggiolini M, Clark LI, Moser B, Virelizier JL;
WPI: 98-123039/12.
Human stromal cell-derived chemokine, SDF-1 - useful for treating
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Score 102; DB 31; Length 72;
Pred. No. 2.78e-03;
0; Mismatches 0; Indels
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100.0%; Score 102; DB 31; Length 73;
Best Local Similarity 100.0%; Pred. No. 2.78e-03;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDF-1-alpha; stromal derived factor; hematopoietic cell; inflammatory disease; infectious disease; AIDS; neurodegenerative disease.
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                                                                                                                                                                               W50763 standard; peptide; 73 AA.
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R75419 standard; Protein; 89 AA.
                Best Local Similarity 100.0%;
Matches 12; Conservative
       100.0%;
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                                                                         48 gvcidpklkwig 59
                                                                                                           1 QVCIDPKLKWIQ 12
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                                                                                                                                                                                                W50763;
27-JUL-1998
                                                                                                                                                                                                                                                                                       Homo sapiens
   Query Match
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Synthetic.
FR2751658-Al.
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                                                                                        14-JAN-1993;
                                 EP-607054-A.
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                                                                                                                                            Honjo T,
protein
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     Human stromal cell-derived chemokine, SDF-1 - useful for treating thuman stromal cell-derived chemokine, SDF-1 - useful for treating pT human immunodeficiency virus infection

PT claim 10: page 30: 48Pp; French.

CC The invention relates to peptides which bind to a cellular receptor for the invention relates to peptides which bind to a sellular receptor (CC chemokines, namely the CXCR4 receptor), especially where the expressed transmembrane domain receptor), especially where the peptide is human chemokine SDF-1. The peptide can be used to treat or peptide is human chemokine SDF-1. The peptide can be used to treating HIV-creeptor antagonists, immunotherapy agents, agents for treating HIV-creeptor antagonists, immunotherapy agents, agents for treating HIV-creeptor antagonists, immunotherapy agents, or ther CXC or CC chemokines, associated opportunistic infections and/or other CXC or CC chemokines, cspecially RANTES, MTP1-alpha , MTP1-beta or MCP1. The peptides used to detect anti-SDF-1 antibodies in biological fluids. Peptides used to identical amino acid residues to W50760 with the exception of the correct or agences W50764-5.
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Protein encoded by cDNA derived from mouse stroma; cell line; ST2; primer; polymerase chain reaction; amplify; PCR; linker; plasmid; expression vector; pSRT; infection; transformation; E.coli DH5 alpha; cDNA library; signal peptide;
                             Claim 2; Page 22; 43pp; English.

A cDNA library prepared from human pro-B cell line FLEB14 cells was a corecand with 32P-labeled mouse SDF-1-alpha cDNA.

A positive clone sorteined an insert of 1.9 kb (0.74089), including an ORF (0.74088) encoding human SDF-1-alpha (R75419). Recombinant hSDF-1-alpha was produced in E. coll and COS cells.

Sequence 89 AA;
                                                                                                                                                                                                               Gaps
           diseases, infectious diseases, AIDS or neuro:degenerative diseases
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WPI; 98-123039/12.
                                                                                                                                                                        Score 102; DB 13; Length 89;
Pred. No. 2.78e-03;
0; Mismatches 0; Indels
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Local Similarity 100.0%;
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                                                                                                                                                                                                                           Conservative
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26-JUL-1996; FR-009477.
(INSP.) INST PASTEUR.
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ID DAC DDT KW KW KW KW KW FH

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Human stromal cell-derived chemokine, SDF-1 - useful for treating
Human stromal cell-derived chemokine, SDF-1 - useful for treating
Human stromal cell-derived chemokine,
Claim 10; Page 31; 48pp; French.
Claim 10; Page 31; 48pp; Fre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               by fractionated. The CDNA was then ligated into a plasmid obtd. by digestion of the expression vector, pSRT. After transformation of an digestion of the expression vector, pSRT. After transformation of an E.coli DH5 alpha strain, a cDNA library having selectivity for signal peptides was obtained. The protein encoded by the isolated sequence is a useful agent in the treatment or prevention of anaemia, leukopaenia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stromal cell-derived chemokine; SDF-1; human immunodeficiency virus; HIV; CXCR4 receptor; leukocyte-expressed transmembrane domain receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 construction of a cDNA library which has selectivity for signal peptides - and novel peptide identified using the process, having application in the treatment of anaemia, leukopenia and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (INSP ) INST PASTEUR.
Arenzana SF, Baggiolini M, Clark LI, Moser B, Virelizier JL;
WPI; 98-123039/12.
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100.0%; Score 102; DB 12; Length 89;
Best Local Similarity 100.0%; Pred. No. 2.78e-03;
Matches 12; Conservative 0; Mismatches 0; Indels
20..89 /note= "Protein N-terminal fragment"
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26-JUL-1996; 009477.
26-JUL-1996; FR-009477.
                                                                                                                                                                                                                                                                              (HONJ/) HONJO T.
(ONOY ) ONO PHARM CO LTD.
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14-JAN-1994; 300267
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PT Human strongl cell-derived chemokine, SDF-1 - useful for treating
Thuman immunodeficiency virus infection
Claim 4; Figure 5; 48pp; French.
CC The invention relates to peptides which bind to a cellular receptor (acc cxc chemokines, namely the CXCR4 receptor (also known as leukocytec cxpressed transmembrane domain receptor), especially where the peptide is human chemokine SDF-1. The peptide can be used to treat or inhibitors, viral protease inhibitors, soluble CD4 receptors transcriptase associated opportunistic infections and/or other CXC or CC chemokines, especially RANTES, MIP1- alpha, MIP1- beta or MCP1. The peptide can be seed to treat or sequence receptor antagonists, immunotherapy agents, agents for treating HIV-cspecially RANTES, MIP1- alpha, MIP1- beta or MCP1. The peptide can be sequence epresents human SDF-1.
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Human SDF-1 which is useful for treating HIV.
Stromal cell-derived chemckine; SDF-1; human immunodeficiency virus;
HIV: CXCR4 receptor; leukocyte-expressed transmembrane domain receptor.
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      identical amino acid residues to W50760 with the exception of the sequences W50764-5.
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26-ULL-1996; FR-009477.
(INSP ) INST PASTEUR.
Arenzana SF, Baggiolini M, Clark LI, Moser B, Virelizier JL;
WPI; 98-123039/12.
                                                                                                                                   Score 102; DB 31; Length 93;
Pred. No. 2.78e-03;
0; Mismatches 0; Indels
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Pred. No. 2.78e-03;
0: Mismatches 0; Indels
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/label= Sig_peptide
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14-0CT-1993, JP-280505.
(ONOY ) ONO PHARM CO LTD.
HONJO T, Shirozu M, Tada H;
WPI: 95-207311/28.
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Best Local Similarity 100.0%;
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PT Chantactic Introduction to the terologous polypeptide, used for, e.g. Chaim 14c; Page 45-46; 69pp; English, used for, e.g. Chaim 14c; Page 45-46; 69pp; English.

Construct comprising an isolated polypuclectide encoding a chimeric construct comprising an isolated polypuclectide encoding a chimeric construct comprises at least 1 chemokine polypeptide covalently better the construction, the chimeric polypeptide covalently will have longer and increased biological activity and can direct the chemokine to a particular site. The chimeric polypeptides can also be designed to inhibit or desensitise chemokine receptors. They can be used to affect the Chemotactic recruitment of migratory cells, e.g. for cartilage, ligament or tendon, for recruiting transplanted bone marrow contributing anglogenesis. for respendenting or bone marrow contributing anglogenesis. for respendenting inflammatory or calls to bone marrow or for treating or preventing inflammatory or preventing HTV infection. Neutralising antibodies binding to the chimeric contributions and so be used as vaccine adjuvants or to polypeptide may also be useful therapeutics for both conditions concernated with the chemokine corresponding to the chimmeric concernation of propertide and also in the treatment of some forms of secure where abnormal expression of the chemokine is involved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-DEC-1998 (first entry)
Human chemokine SDF-lalpha domain protein from clone SK2-2.
Chemokine; SDF-lalpha, chimeric; human; heterologous protein; inhibitor; receptor; chemotaxis; migratory cell; amgiogenesis; bone; regeneration; autoimmune disorder; vaccine adjuvant; antigen presenting; HIV; human immunodeficiency virus; therapy; prevention.
            Polypeptide(s) used for treating diseases relating to undergrown or diseases, infections diseases, AIDS or neuro: degenerative diseases, Claim 12: page 26-27; 43pp; English.

A cDNA library prepared from human pro-B cell line FLEB14 cells was contained an insert of 3.5 kb (074091), including an OBF (274090) produced in E. coli and COS cells.
                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New chimeric polypeptide(s) - comprise chemokine polypeptide covalently linked to heterologous polypeptide, used for, e.g.
                                                                                                                                                                                                                                     Score 102; DB 13; Length 93;
Pred. No. 2.78e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "Chemokine domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= signal
/note= "signal peptide"
31..326
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= SDF-1alpha
                                                                                                                                                                                                                                                                                                                                                                                                                  W76221 standard; Protein; 326 AA.
                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                   12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEMY ) GENETICS INST INC.
N-PSDB; Q74090; Q74091.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Herrmann SH, Swanberg SL;
WPI; 98-495387/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-FEB-1997; US-808720.
                                                                                                                                                                                                                                                                                                    69 gvcidpklkwig 80
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recould noncottactic factor type polypeptide and DNA Human monocyte chemotactic factor type polypeptide and DNA Human monocyte chemotactic factor type polypeptide and antitumour agents.

The sequence was deduced from the DNA sequence determined from the execumbinant plasmids, PHMCF7, PHMCF25 and PHMCF29 which three recombinant plasmids, PHMCF7, PHMCF25 and PHMCF29 which three recombinant plasmids phwCF7, PHMCF29 bases 105 and 226 were isolated from a cDNA library prepd. from RNA extracted from were isolated from a cDNA library prepd. from RNA extracted from were isolated from promyclolaries and library prepd. from RNA extracted from the promyclolaries promyclolaries and phwCF29 bases 105 and 226 were cectors. In plasmids PHWCF7 and PHWCF29 bases 105 and 226 were to extensive protein is therefore not determined and may be of the precursor protein may be produced by recombinant contrain bacterial infectons and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-NOV-1997 (first entry)
07-NOV-1997 (first entry)
monocyte chemoattractant protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
associated with the chemokine corresponding to the chemokine domain of the chimeric polypeptide and also in the treatment of some forms of cancer where apportmal expression of the chemokine is involved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human MCF precursor.
Monocyte chemotactic factor; antibacterial; antitumour; cancer.
                                                                                                                           Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 74.5%; Score 76; DB 2; Length 99; Best Local Similarity 58.3%; Pred. No. 1.42e+00; Matches 7; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (USDC) US SEC OF COMMERCE. Furutani Y, Fukui T, Junichi Y, Masaaki Y, Matsushima K;
                                                                                                                           Score 102; DB 35; Length 32
Pred. No. 2.78e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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/label=mature MCF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label * A or T
                                                                                                                                   / Match 100.0%;
Local Similarity 100.0%;
les 12; Conservative
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26-JUL-1990.
02-JAN-1990; U00004.
01-JAN-1989; JP-000065.
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                                                                                               328 AA;
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                                                                                                                                             Query Match
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New chimeric polypeptide(s) - comprise chemokine polypeptide

New chimeric polypeptide(s) - comprise chemokine polypeptide

Tovalently linked to heterologous polypeptide, used for, e.g.

chemotactic recruitment of migratory cells

Signalish.

Ca finis sequence represents a human chemokine SDF-lalpha domain, isolated

C from cDNA clones S1-2 and S1-3. This sequence is used in the production

from cDNA clones S1-2 and s1-3. This sequence is used in the production

c from cDNA clones S1-2 and s1-3. This sequence is used in the production

c datached to at least 1 heterologous polypeptide. By including a chimeric comparable protein in the construction, the chimeric polypeptides can also be comparable to a particular site. The chimeric polypeptides can also be commokine to a particular site. The chimeric polypeptides can also be commokine to a particular site. The chimeric polypeptides can also be configured to inhibit or desensitise chemokine receptors. They can be used designed to inhibit or desensitise chemokine receptors. They can be used catillate, ligament or tendon, for recruiting transplanted bone marrow cartilage, ligament or tendon, for recruiting transplanted bone marrow cartilage, ligament or tendon, for recruiting inflammatory or cells to bone marrow, or for treating or preventing inflammatory or cells to bone marrow, or for treating or preventing inflammatory or cells to bone marrow, or for treating cells and for treating or cenhance the activity of antigen presenting cells and for treating or cenhance the activity of antigen presenting antibodies binding to the chimeric polypeptide may also be useful therapeutics for both conditions
                                                                                                                                                                                                                                                                                                                                                     02-DEC-1998 (first entry)
Human chemokine SDF-lalpha domain protein from clones SI-2/SI-3.
Human chemokine, SDF-lalpha: chimeric; human; heterologous protein; inhibitor; chemokine; SDF-lalpha: chimeric; human; heterologous protein; regeneration; receptor; chemotaxis; migratory cell; angiogenesis; bone; regeneration; receptor; chemotaxis; chemom; bone marrow; transplant; inflammation; autoimmune disorder; vaccine adjuvant; antigen presenting cell; cancer; HIV; human immunodeficiency virus; therapy; prevention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= SDF-lalpha
/note= "Chemckine domain. Putative start of mature
protein"
23..328
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/note= "Chemokine domain. Putative start of mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Chemokine domain. Putative start of mature
protein"
                                                                                                                 Gaps
                                                                                                              0
                                                             Score 102; DB 35; Length 326;
Pred. No. 2.78e-03;
0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "putative signal peptide"
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                                                                             Query Match
Best Local Similarity 100.0%;
                                                                                                                             12; Conservative
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Gaps ö 9

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Disclosure; Page 5: 27pp; English.

Chemoatractarant protein-1 (MCP-1). The analogue, Which lacks the chemoatractarant protein-1 (MCP-1). The analogue, which lacks the chemoatractarant protein-1 (MCP-1). The analogue, which lacks the as in lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration inflammatory mediator causing migration inflammatory diseases. MCP-1 has been implicated in allergic and chronic cinflammatory diseases e.g. arthritis, arteriosclerosis and chronic diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably cut with 75:1 for prior art mutant 7ND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in altergic and chronic diseases. The analogue competes more effectively with MCP-1 ceptors than prior art mutant versions of MCP-1 e.g. providing 50% inhibition of binding at a 25:1 ratio or less, compared 50 Sequence 67 AA;
                                                                                      N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractant protein analogue MCP-1 (11-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
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Pred. No. 1.80e+00;
3; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       anti-inflammatory agent
Disclosure; Page 5; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JT 15
W13599 standard; peptide; 67 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Y Match 73.5%;
Local Similarity 58.3%;
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
                                                                                                                             anti-inflammatory agent
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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                                                     Gong J, Lewis I;
WPI; 97-165844/16.
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Best Local Similarity
                                    (LEWI/) LEWIS I.
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CA2152141-A.
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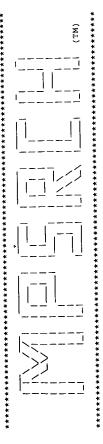
7; Conservative

Matches

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41 eicadpkgkwvg 52
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Search completed: Fri Feb 4 17:02:58 2000 Job time : 20 secs.



Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:09:44 2000; MasPar time 2.49 Seconds 136.407 Million cell updates/sec

Tabular output not generated.

>US-09-150-813-40 (1-12) from US09150813.pep 99 Description: Perfect Score:

1 ELCLDPKENWVQ 12 Sequence:

PAM 150 Scoring table: 77977 seqs, 28268293 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

swiss-prot37 1:swissprot

Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 26.183; Variance 34.228; scale 0.765

SUMMARIES

Pred. No.	5.80e-10	5.72e-09	3.12e-08	3.12e-08	2.90e-07	2.90e-07	2.90e-07	1.51e-06	1.51e-06	1.31e-05	6.44e - 05	3.08e-04	3.08e-04	5.17e-04	5.17e-04	8.63e-04	1.44e - 03	2.38e-03	2.38e-03	2.38e-03	3.93e-03	3 936-03	2020-02	0.000.0
Description	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	EMBRYO FIBROBLAST PROT	EOTAXIN PRECURSOR (EOS	FOTAXIN PRECURSOR (EOS	-23			ECIPAIN FACOROGIA (ECO	MONOCYTE CHEMOTACIIC P								
QI	TI'S HUMAN	ILS RABIT	IL8 MACMU	IL8 CERTO	IL8 SHEEP	ILS CANFA	ILB PIG	IL8 BOVIN	IL8 CAVPO	MCPA BOVIN	MCP4 HUMAN	MCP1 HUMAN	MCP1 CANFA	MIIA RAT	MCP1 PIG	MCP2 BOVIN	EMF1 CHICK	EOTA MOUSE	FOTA RAT	MCP5 MOIISE	MCDB BOWTN	MCFD_DOVIES	EOTA_HUMAIN	MCP1_MOUSE
DB	: -	٠.				·	·	۰,	٦,	٦,		۱,	-, ا	-	- ،			-		-	٠,	٠,	٦.	Н
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Query Match I	000	0.95	0.00	6.06	0	0 0	0 0	, o	σ σ σ	81.8	20.00	7.5	7.5.0	74.7	7.4.7	73.7	1.07	71 7	71.7	71.7	101	10.7	70.7	70.7
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ALIGNMENTS

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GOLDS E.E., MASON P., NYIRKOS P., "Inflammatory cytokines induce synthesis and secretion of gro protein and a neutrophil chemotactic factor but not beta 2-microglobulin in human synovial cells and fibroblasts.";

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MIZUNO S.;
                                                                                                                                                                                                                                                            "Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells.";
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                                                                                                                                                                                                                                                                                                                                                                           GREGORY H., YOUNG J., SCHROEDER J.M., MROWIETZ U., CHRISTOPHERS E., "Structure determination of a human lymphocyte derived neutrophil activating peptide (LYNAP).";
BIOCHEM. BIOPHYS. RES. COMMUN. 151:883-890(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WALZ A., PEVERI P., ASCHAUER H., BAGGIOLINI M.;
"Purification and amino acid sequencing of NAF, a novel neutrophilactivating factor produced by monocytes.";
BIOCHEM. BIOPHYS. RES. COMMUN. 149:755-761(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLORE G.M., APPELLA E., YAMADA M., MATSUSHIMA K., GRONENBORN A.M.;
"Three-dimensional structure of interleukin 8 in solution.";
BIOCHEMISTRY 29:1689-1696(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YOSHIMURA T., MATSUSHIMA K., TANAKA S., ROBINSON E.A., APPELLA E., OPPENHEIM J.J., LEONARD E.J.;
"Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence similarity to other host defense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 90216714.
BALDWIN E.T., FRANKLIN K.A., APPELLA E., YAMADA M., MATSUSHIMA K., WLODAWER A., WEBER I.T.;
"Crystallization of human interleukin-8. A protein chemotactic for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 91110556.
BALDWIN E.T., WEBER I.T., ST CHARLES R., XUAN J.C., APPELLA E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      X-RÁY CRYSTALLOGRAPHY (1.6 ANGSTROMS), AND STRUCTURE BY NMR.
                             SUBMITTED (JAN-1993) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . NATL. ACAD. SCI. U.S.A. 84:9233-9237(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRUCTURE BY NMR OF COMPLEX TO RECEPTOR.
SKELTON N.J., QUAN C., REILLY D., LOWMAN H.;
SUBMITTED (DEC-1998) TO THE PDB DATA BANK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X-RAY CRYSTALLOGRAPHY, AND STRUCTURE BY NMR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neutrophils and T-lymphocytes.";
J. BIOL. CHEM. 265:6851-6853(1990).
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88162914.
                                                                                                                                                                                               SEQUENCE OF 23-54.
SEQUENCE FROM N.A.
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                                                                SEQUENCE OF 23-46
                                                                                   89246368.
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                   SHIKAWA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
YAMADA M., MATSUSHIMA K., EDWARDS B.F., CLORE G.M., GRONENBORN A.M., "Crystal structure of interleukin 8: symbiosis of NMR and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BAGGIOLINI M., CLARR-LEWIS I.;
"Interleukin-8, a chemotactic and inflammatory cytokine.";
FEBS LETT. 307:97-101(1922).
-1- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BAIN NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
                                                                                                                                            "The neutrophil-activating proteins interleukin 8 and beta-thromboglobulin: in vitro and in vivo comparison of NH2-terminally processed forms.";
                                                                                                                                                                                                                                                      VAN DAMME J., VAN BEEUMEN J., CONINGS R., DECOCK B., BILLIAU A., "Purification of granulocyte chemotactic peptide/interleukin-8 reveals N-terminal sequence heterogeneity similar to that of beta-thromboglobulin.",
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00471; SNALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                          VAN DAMME J., RAMPART M., CONING R., DECOCK B., VAN OSSELAER N.,
                                                                                                                                                                                                                                                                                                                                                                                                                "Chemical synthesis, purification, and characterization of two inflammatory proteins, neutrophil activating peptide 1 (interleukin-8) and neutrophil activating peptide."; BIOCHEMISTRY 30:3128-3135(1991).
                                                                                                                                                                                                                                                                                                                                                                                  CLARK-LEWIS I., MOSE B., WALZ A., BAGGIOLINI M., SCOTT G.J.,
                                crystallography.";
PROC. NATL. ACAD. SCI. U.S.A. 88:502-506(1991).
                                                                                                                                                                                           EUR. J. IMMUNOL. 20:2113-2118(1990).
                                                                                                                                                                                                                                                                                                                     J. BIOCHEM. 181:337-344(1989).
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EMBL; M17017; G179580; -.
EMBL; M26383; G188628; -.
EMBL; M28130; G186368; -.
EMBL; D14283; G219916; -.
                                                                                                                              WILLEMS J., BILLIAU A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-98.
23-DEC-98.
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ZILB; 15-JAN-91.
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S03975; S03975.
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PDB; 11KL; 15-0CT-95
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                                                                            N-TERMINAL FORMS.
MEDLINE; 91006326
                                                                                                                                                                                                                                          89231715.
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                                                                                                                                                                                                                        N-TERMINAL FORMS.
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                                                                                                                                                                                                                                                                                                                                                                                               AEBERSOLD R.;
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146930;
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PDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 interleukin 8.";
BIOCHEM. J. 271.797-801(1990).
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
INTERLEUKIN-8.
ONE OR MORE OF THESE RESIDUES ARE MISSING
IN SOME MATURE FORMS OF IL-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity in vivo. Purification, partial amino acid sequence and structural relationship to
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1991 (REL. 17, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT/ACTIVATION
PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RPF1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 23-53.
STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY;
MEDILINE; 91058918.
BEAUBIEN B.C., COLLINS P.D., JOSE P.J., TOTIY N.F., HSUAN J.,
WATERFIELD M.D., WILLIAMS T.J.;
                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YOSHIMURA T., YUHKI N.; "Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit. cDNA cloning and their
                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                             Score 99; DB 1; Length 99; Pred. No. 5.80e-10;
                                                                                        -> L (IN REF. 7).
                                                                                                                                                                                                                                  0; Mismatches
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PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM: PF00048; 118; 1.
HSSP: P10145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
MEDLINE; 91225489.
                                                                                                                                                             Note: remainder of annotations omitted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression in spleen cells."; J. IMMUNOL. 146:3483-3488(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                    Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
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77
53
48
48
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46
49
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P19874;
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         CHAIN
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INFLAMMATION 11-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-!- SUBCIPILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
RESPONDE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-!- SUBUNT: HOMODIMER (BY SIMILARITY).
-!- SUBUNT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
-:- C-X-C) (CHEMOKINE CXC).
                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Comparative sequence analysis of cytokine genes from human and
                                                                                                                                                                                                                                                                                                                                                                                         MACACA NEMESTRINA (PIG-TAILED MACAQUE).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; CERCOPITHECIDAE; CERCOPITHECINAE; MACACA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 96003435.
VILLINGER F.J., BRAR S.S., MAYNE A.E., CHIKKALA N., ANSARI A.A.
                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. SPECIES-M.MULATTA: TISSUE-BLOOD;
MEDLINE; 95355132.
MINDERLY J.C., BAGANOFF M.P., DEPPELER C.L., KELLER B.T., RAPP S.R., WICOMSKI D.L., FRETLAND D.J., BOLANOWSKI M.A.; RAPP S.R., WICOMSKI D.L., FRETLAND D.J., BOLANOWSKI M.A.; Identification and characterization of rhesus macaque
                                                                                                                    Length 101;
                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
INFLAMMATORY RESPONSE; SIGNAL.
                                            BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF. 2).
4; CB32CC30 CRC32;
                                                                                                                   Score 95; DB 1; LA
Pred. No. 5.72e-09;
1; Mismatches 0,
                                                                                                                                                                                                                                                                                                    01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-0CT-1996 (REL. 34, LAST ANNOTATION UPDATE)
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BY SIMILARITY.
BY SIMILARITY.
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EMBL, S78555; G1042228; -...
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
                               INTERLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                                                                 MACACA MULATTA (RHESUS MACAQUE), AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMUNOL. 155:3946-3954(1995).
                                                                                                                                                                                                                                                                                                                                                   INTERLEUKIN-8 PRECURSOR (IL-8).
              22
101
61 BN
77 BN
50 K
11402 MW;
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                                                                                                                         96.08;
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Conservative
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      CHEMOTAXIS;
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nes 11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                            101 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nonhuman primates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IISSUE-BLOOD
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DISULFID
DISULFID
                                                                                                                                                                                                                                                                            IL8_MACMU
P51495;
         CYTOKINE;
                                                                            CONFLICT
                                                                                                                           Query Match
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SEQUENCE

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1 ELCLDPKENWVQ 12
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                                                                                                                SECUENCE FROM N.A. MEDLINE; 95121931.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sest Local Similarity
                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                  MEDLINE; 95137691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IL8_CANFA
P41324;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J. IMMUNOL. 155:3946-3954(1995).
-!- FUNCTION: 1L-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONGCYTES. IT IS ALSO INVOLVED IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-!- SUBUNT: HOWODIMER (BY SIMILARITY).
-!- SUBUNT: HOWODIMER (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE CX.C.) (CHEMOKINE CXC).
                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                             CERCOCEBUS TORQUATUS ATYS (RED-CROWNED MANGABEY) (SOOTY MANGABEY).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; CERCOPITHECIDAE; CERCOPITHECINAE; CERCOCEBUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VILLINGER F.J., BRAR S.S., MAYNE A.E., CHIKKALA N., ANSARI A.A., "Comparative sequence analysis of cytokine genes from human and nonhuman primates.";
                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                    Score 92; DB 1; Length 101;
Pred. No. 3.12e-08;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 92; DB 1; Length 101;
Pred. No. 3.12e-08;
0; Mismatches 1; Indels
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101 AA; 11320 MW; 77D78AAO CRC32;
                                                                                                                                                                                                                                                                         01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
BY SIMILARITY.
7 47F1BF00 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P36925;
01-JUN-1994 (REL. 29, CREATED)
01-JUN-1994 (REL. 39, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                  101 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
INTERLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; U19839; G644796; -.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                   INTERLEUKIN-8 PRECURSOR (IL-8).
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                                      92.9%;
ilarity 91.7%;
Conservative
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Local Similarity 91.7%;
                                                                                                                                                                                                                                         STANDARD;
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              Query Match
Best Local Similarity 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PFAM; PF00048; i18; 1.
HSSP; P10145; 11L8.
                                                                                                                                          1 ELCLDPKENWVO 12
                                                                                                                75 ELCLDPKEPWVQ 86
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=BLOOD;
MEDLINE; 96003435
                                                                                                                                                                                                                      LT 4
IL8_CERTO
P46653;
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                                                                                                                                                                                                                                                                                             OVIS ARIES (SHEED).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; CAPRINAE; OVIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                       LEGASTELOIS I., GREENLAND T., ARNAUD P., MORNEX J.F., CORDIER G., "Sequencing of the ovine interleukin-8-encoding cDNA using the polymerase chain reaction."; GENE 150:367-369(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 94010328.
ISHIKAWA J., SUZUKI S., HOTTA K., HIROTA Y., MIZUNO S., SUZUKI K.; "Cloning of a canine gene homologous to the human interleukin-8-encoding gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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CARNIYORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 88; DB 1; Length 101;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 2.90e-07;
2; Mismatches 0
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BY SIMILARITY.
5A574527 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; X78306; G463254; -.
EMBL; S7436; G786591; -.
PIR; S42496; S42496.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM: PF00048; 118; 1.
HSSP; P10145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INTERLEUKIN-8 PRECURSOR (IL-8)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101 AA; 11292 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
101
61
77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CANIS FAMILIARIS (DOG)
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SEQUENCE OF 26-45.
                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                        SEQUENCE FROM N.A. MEDLINE; 94103307.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-YORKSHIRE;
                                                                                                                                                                                                                                                                                                                                                                             REVISION TO 23.
                                                                                                                                                                                                                                                                                                                                                                                          GOODMAN R.B.;
                                 (AMCF-I).
          01-OCT-1996
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                                                                                                                      MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                          -i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                         STRAUBINGER R.K., STRAUBINGER A.F., HARTER L., JACOBSON R.H., CHADDINGER R.K., SUMMERS B.A., ERB H.N., APPEL M.J.;
CHANG Y.-F., SUMMERS B.A., ERB H.N., APPEL M.J.;
"Borrelia burgdofferi migrates into joint capsules and causes an upregulation of interleukin-8 in synovial membranes of dogs experimentally infected with ticks.";
INFECT. IMMIN. 65:1273-1285(1997).
INFORTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS, FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS, NEUTROPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                     SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN-MONGREL: TISSUE-JUGULAR VEIN;
MEDLINE: 95114148.
KUKIELKA G.L., SMITH W.C., LAROSA G.J., MANNING A.M.,
KUKIELKA G.L., SMITH W.C., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,
MICHAEL L.H., ROT A., ENTWAN M.L.;
"Interleukin-8 gene induction in the myocardium after ischemia and
                                                           MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T., GOITGURA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA K., ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.; "MOLECULAI Cloning and expression of canine interleukin 8 cDNA.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 88; DB 1; Length 101; Pred. No. 2.90e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
7C49D62D CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AF048717; G2933472; -. PROSITE: PSO04711; SMLL_CYTOKINES_CXC; 1. PROSITE: PF00048; 118; 1. HSSP; PIO145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                                                        RESPONSE TO AN INFLAMMATORY STIMULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                            reperfusion in vivo.";
J. CLIN. INVEST. 95:89-103(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL8_PIG STANDARD;
P26894; P22951;
Ol-AUG-1991 (REL. 19, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11280 MW;
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10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; D28772; G517100; -. EMBL; D14285; G475152; -. EMBL; U10308; G607814; -.
                                                                                                              CYTOKINE 6:455-461(1994)
   GENE 131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75 EVCLDPKEKWVQ 86
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                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                      MEDLINE; 97230298.
                            SEQUENCE FROM N.A.
TISSUE=LYMPH NODE;
MEDLINE; 95127913.
                                                                                                                                                                                                                                                                             STRAIN-BEAGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
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-:- INDUCTION: BY LIPOPOLYSACCHARIDE.
-:- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                  01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               porcine alveolar macrophages ";
J. BIOL. CHEM. 26:8455-8463(1991).
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-!- SUBUNIT: HOMODIMER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-LUNG;
MEDLINE; 93041741.
GOODMAN R.B., FOSTER D.C., MATHEWES S.L., OSBORN S.G., KUIJPER J.L.,
GOODMAN R.B., FOSTER D.C., MATHEWES S.L., OSBORN S.G., KUIJPER J.L.,
"Molecular cloning of porcine alveolar macrophage-derived neutrophil
chemotactic factors I and II; identification of porcine IL-8 and
anocher intercrine-alpha protein.";
BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.; "Identification of two neutrophil chemotactic peptides produced by
                                                                                                                                                                          SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                      LIN G., PEARSON A.E., SCAMURRA R.W., ZHOU Y., BAARSCH M.J., WEISS D.J., MURTAUGH M.P.; Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolygaccharide."; J. BIOL. CHEM. 269:77-85(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL. SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SANJANWALA M.;
SUBMITTED (JUL-1991) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (MAR-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY BY SIMILARITY
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND SEQUENCE OF 26-45
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EMBL; X61151; G516197; -.
EMBL, M99367; G1235612; -.
PIR; A44253; A44253.
PIR; A39819; A39819.
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103
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"MICROB. PATHOG. 20:203-212(1996).

"FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SYPERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).

"I-SUBUNIT: HOWODIMER (BY SIMILARITY).

"I-SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                            BOS TAURUS (BOVINE).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHBRIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                           MORSEY M.A., POPOWYCH Y., KOWALSKI J., GERLACH G., GODSON D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                  Score 88; DB 1; Length 103;
Pred. No. 2.90e-07;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
HSSP; P10145; 11KL.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
 33 34 RC -> CR (IN REF. 5).
87 87 K -> KK (IN REF. 2).
103 AA: 11633 MW; A012D59D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 85; DB 1; L/
Pred. No. 1.51e-06;
3; Mismatches 0
                                                                                                                                                                                                                                                            01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0E39C526 CRC32;
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01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY.
INTERLECKIN-8.
BY SIMILARITY.
BY SIMILARITY.
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36 77 B
101 AA; 11291 MW;
                                                                                    Similarity 83.3%;
10; Conservative
                                                                      88.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85.9%;
75.0%;
                                                                                                                                                                                                                                  STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAMPOS M., BABIUK L.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                   75 EVCLDPKEKWVQ 86
                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |:||:||:|||
1 ELCLDPKENWVQ 12
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P79255;
CONFLICT
CONFLICT
SEQUENCE
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                                                                 Query Match
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                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A) (MCP-1) (ACIDIC SEMINAL FLUID PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WEMPE F., HENSCHEN A., SCHEIT K.H.;
"Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).";
DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BOS TAURUS (BOYINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT PROTEIN 1)
                                                   EUKARYOTA; METAZÒA; CHORDATÁ; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
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2; Mismatches 1; Indels
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BY SIMILARITY
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PFAM; PF00048; 118; 1.
HSSP; P10145; 11KL.
                                                                                                                                                                                                                                                                                                                                                                     or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 22 BY
23 101 IN
34 61 BY
36 77 BY
101 AA; 11414 MW;
                                      CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                   C-X-C) (CHEMOKINE CXC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                               EMBL; L04986; G459765; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=SEMINAL PLASMA;
MEDLINE; 92096117.
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                                                                                           SEQUENCE FROM N.A.
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                                                                                                                     MEDLINE; 94065176.
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                                                                                                         TISSUE=SPLEEN;
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P28291;
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TISSUE-FETAL
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J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                        -i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
               WEMPE F., EINSPANIER R., SCHEIT K.H.; "Characterization by cDNA cloning of the mRNA of a new growth factor from bovine seminal plasma: acidic seminal fluid protein."; BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                                                                                             WEMPE F., KUHLMANN J.K., SCHEIT K.H.; "Characterization of the bovine monocyte chemoattractant protein-1
                                                                                                                                              BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MONOCYTE CHEMOTACTIC PROTEIN 1A. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOPACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 81; DB 1; L pred. No. 1.31e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C8F5821D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98 AA.
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY.
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PFAM; PPO0048; i18; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99 AA; 11114 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               larity 75.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                 EMBL; L32659; G624394; -.
                                                                                                                                                                                                                                                                                                                                                           EMBL, M84602, G163395; -. PIR, A39296; A39296. PIR, JC2336.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ELCLDPKENWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=HEART;
MEDLINE; 97113354.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                       SEQUENCE FROM N.A. MEDLINE; 94338337.
           MEDLINE; 92181448.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MCP4_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       099616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                      WEMPE F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POWER C.A., MEYER A., RISON S.C.G., GUYE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LIMPHOCYTES,
-2- FONCTION: CHEMOTACTIC FACTOR THAT ATTRACTES, DIONACYTES, LIMPHOCYTES,
-3- FONCTION: CHEMOTACTIC FACTOR MONOCYTES, LIMPHOCYTES,
-4- FONCTION: CREEPORS. PLAYS A ROLE IN THE ACCUMILATION OF
LEGICOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MALL DURING THE BISEASE PROCESS OF ALLERGICS INTO THE ARTERRAL
MALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                  MEDCINE; 96235049.
MEDCINE; DECISION OF THE P., FORSSMANN U., DEWALD B., LI H., LIMA S.H., UGUCCIONI M., LOETSCHER B., GAROTTA G., THELEN M., BAGGIOLINI M.;
MONOCYTE CHEMICACLIC PROTEIN 4 (MCP-4), a novel structural and functional analogue of MCP-3 and eotaxin.";
J. EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-FETAL;
MEDLINE; 97341179.
MEDLINE; 97341179.
MEDLINE; 97341179.
APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J.,
APPELBAUM E., REAPE T.J., BRAWNER M., MATHEWS J., O'DONNELL K.,
C'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPEBE C.,
O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPEBE C.,
O'CHANNESSY D., COTT M., GROOT P.H.E., MACPEBE C.,
In vitro expression, and functional characterization of a
novel human CC Chemokine of the monocyte chemotactic protein (MCP)
family (MCP-4) that binds and signals through the CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS; SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MONOCYTE CHEMOTACTIC PROTEIN 4. PYRROLIDONE CARBOXYLIC ACID. BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
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SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
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HSSP; P13500; 1DOL.
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Sat Feb

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01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MOP-1) (MONOCYTE CHEMOTACTIC
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HCI1) (SMALL INDUCIBLE CYTOKINE
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 89165862.

BUGUTANI Y., NOWINA H., NOTAKE M., OYAMADA Y., FUKUI T., YAMADA M., LARSEN C.G., OPPENBLEIM J.J., MATSUGHIMA K.;

"Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).";

BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.; "Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family."; INMUNOL. 1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                        HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHYY Y.J., LI Y.S., KOLATTUKUDY P.E.,
"Structure of human monocyte chemotactic protein gene and its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LI Y.S., SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YOSHIMURA I., YUHKI N., MOORE S.K., APPELLA E., LERMAN M.I.,
LEONARD E.J.;
                                                         78; Db 1,
No. 6.44e-05;
Thes 1; Indels
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     BY SIMILARITY.
POTENTIAL.
DF52F6EC CRC32;
                                                                                      2; Mismatches
                                                                                                                                                                                               99 AA.
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                                                           Score 78;
Pred. No.
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 35 74
29 29
98 AA; 10986 MW;
                                                                  Local Similarity 75.0%;
les 9; Conservative
                                                           78.88;
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P13500;
DISULFID
                           SEQUENCE
               CARBOHYD
                                                       Query Match
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FEBS LETT. 395:277-282(1996).

FOUNTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISBASES CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                          ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA S., GRIFFIN P.R., SHABANOWITZ J., HUNT D.F., APPELLA E., "Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions."; PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
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Structure/activity analysis of human monocyte chemoattractant
protein-1 (MCP-1) by mutagenesis. Identification of a mutated protein
that inhibits MCP-1-mediated monocyte chemotaxis.";
J. BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LUBROWSKI J., BUJACZ G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.;
"The structure of MCP-1 in two crystal forms provides a rare example of variable quaternary interactions.";
NAT. STRUCT. BIOL. 4:64-69(1997).
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"Heteronuclear (1H, 13C, 15N) NMR assignments and solution structure of the monocyte chemoattractant protein-1 (MCP-1) dimer.";
BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                                                                                                                                                                        DECOCK B., CONINGS R., LENAERTS J.-P., BILLAU A., VAN DAMME J.; "Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally
                                                                                                                                                                                                                                                                                                                                                                                                                                               GRONEMBORN A. CLORE G.M.;
"Modeling the three-dimensional structure of the monocyte chemo-
attractant and activating protein MCAF/MCP-1 on the basis of the
Solution structure of interleukin-8.";
PROTEIN ENG. 4:263-269(1991).
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"Structural characterization of a monomeric chemokine: monocyte
                                                                     "Human monocyte chemoattractant protein-1 (MCP-1).";
ADV. EXP. MED. BIOL. 305:47-56(1991).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
                                                                                                                                                                                                                                                                          SEQUENCE OF 29-53 AND 82-92.
                                                    YOSHIMURA T., LEONARD E.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                  3D-STRUCTURE MODELLING.
               SEQUENCE FROM N.A.
                                                                                                                         SEQUENCE OF 24-99
MEDLINE; 89184525.
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SEQUENCE FROM N.A.
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                                                                      this SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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        SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
FPM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET
FPM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR CONVERTS
IT FROM AN ACTIVATOR OF BASOPHIL TO AN BOSINOPHIL CHEMOATTRACTANT.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMORINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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MISSING: 83% REDUCTION IN ACTIVITY.
N->A: 90% REDUCTION IN ACTIVITY.
N->F: 95% REDUCTION IN ACTIVITY.
S->C: 40% REDUCTION IN ACTIVITY.
S->C: 40% REDUCTION IN ACTIVITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            >>L: 90% REDUCTION IN ACTIVITY.
5355B695 CRC32;
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R->L: LOSS OF ACTIVITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 75;
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P52203;
01-OCT-1996 (REL. 34, CREATED)
                                                                                                                                                                                                                                           JOINED.
                                                                                                                                                     EMBL; M31626; G386961; -. EMBL; M30816; G386961; JOINED. EMBL; M31625; G386961; JOINED.
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14-0CT-96.
15-0CT-94.
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1 ELCLDPKENWVQ 12
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S03339; S03339.
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     ATHEROSCLEROSIS.
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DISULFID
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EMBL;
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                                                                                                                                                                                                                                  -i- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VEINS, AND INFILITRATING LEUKOCYTES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                 EUKARYOTA; METAZOÀ, CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 101;
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 3.08e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A7075B14 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 75; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; U29653; G1144186; -.
PROSITE: PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY)
                                                                                                                                                                                         SEQUENCE FROM N.A.
TISSUE-JUGULAR VEIN ENDOTHELIAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59 BY
75 BY
11121 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75.8%;
                                                                  CHEMOATTRACTANT PROTEIN-1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C-C) (CHEMOKINE CC).
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101
24
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                                                                                                            CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101 AA;
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Best Local Similarity
                                                                                                                                                                                                                             MEDLINE; 97176620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCYA3 OR MIP1A.
                                                                                           SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                u 14
MI1A_RAT
P50229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
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                                                                                                                                                                                                                                                              INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                           SHI M.M., GODLESKI J.J., PAULAUSKIS J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages.";
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                             ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                               MEDLINE; 95238980.
SHANLEY T.P., SCHMAL H., FRIEDL H.P., JONES M.L., WARD P.A.;
"Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                              MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MCPI_PIG STANDARD; PRT; 99 AA.
P42831;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 74; DB 1; LA
Pred. No. 5.17e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                             ite lung injury in rats.";
IMMUNOL. 154:4793-4802(1995).
                                                                                                   SEQUENCE FROM N.A.
STRAIN=LONG EVANS; TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92 AA; 10335 MW;
   STRAIN-CD-1; TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match
Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; U22414; G790633; -. EMBL; U06435; G459150; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71 QICADPKETWVQ 82
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1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                        SEQUENCE OF 24-57.
                                                                                                                                                                                                                                     STRAIN=WISTAR;
MEDLINE; 96183056.
                                                                                                                                                                                                                                                                                                                                                                                                                                             BINDS HEPARIN.
                 MEDLINE; 9529803
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                        SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY). SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                          MEDLINE; 94183284.

HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;

"Porcine luteal cells express monocyte chemoattractant protein-1
(MCP-1): analysis by polymerase chain reaction and cDNA cloning.";
BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                       -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                              EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 74; DB 1; Length 99; Pred. No. 5.17e-04; 4; Mismatches 1; Indels
                                                                                                                                                                                                                                        SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL; INFLAMMATORY RESPONSE.
                                             ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ECC3AFB4 CRC32;
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; i18; 1. HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10976 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    larity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; Z48479; G683717; -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 EICAEPKOKWVQ 84
                                                                             SEQUENCE FROM N.A. MEDLINE; 94183284.
                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                SUS SCROFA (PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99 AA;
                                                                                                                                                                                                                                                                         NEUTROPHILS
                                                                                                                                                                                                           TISSUE-BRAIN;
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Search completed: Fri Feb 4 17:09:51 2000 Job time: 7 secs.

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1 ELCLDPKENWVQ 12

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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:08:49 2000; MasPar time 3.58 Seconds 134.457 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-40 (1-12) from US09150813.pep 99 Description: Perfect Score:

1 ELCLDPKENWVQ 12 Sequence:

PAM 150 Gap 15 Scoring table:

122810 seqs, 40068593 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

pir60 1:pir1 2:pir2 3:pir3 4:pir4 Database:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. Mean 25.485; Variance 37.640; scale 0.677 Statistics:

SUMMARIES

Pred. No.	1.41e-08	1.106-07	3 726-06	20 201.6	20.72	3.72e-00	3.72e-06	3.72e-06	1.63e-05	1.14e-04	1.14e-04	1.96e-03	3.12e-03	3.12e-03	7.83e-03	7.83e-03	1.94e-02	•	3.05e-02	3.05e-02	4.77e-02	4.77e-02	7.43e-02	7.43e-02
Description	interlenkin-8 orecuts		,	,	, p (interleukin 8 - sneep	alveolar macrophage c		Neutrophil attractant	monocyte chemoattract	monocyte chemoattract	monocyte chemoattract	macrophage inflammato	monocyte chemoattract	RSV-induced protein -	transformation-induce	PDGF-inducible JE gly	monocyte chemotactic	lymphocyte and monocy	monocyte chemoattract	eotaxin precursor - h	monocyte chemotactic	macrophage inflammato	monocyte chemoattract
ΙD	727034	10071	1400/1	1480ND	I46997	S42496	A44253	A53096	I48148	JC2336	A39296	A60299	152322	JC2136	150417	A26736	A30209	JC5295	JE0177	146857	JC4912	A54678	A32393	JC2417
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Query Match I		100.0	96.0	88	88.9	88.9	88.9	88.9	85.9	-	,	7.5		74.7	727	72.7	7.07	7.69	69.7	69.7	7	68.7	67.7	67.7
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monocyte chemoattract monocyte adherence-in pre-Be-cell growth-sti interleukin-8 homolog macrophage inflammato macrophage inflammato cytokine spera inflammato cytokine SDF-1-beta - LD78-beta protein pre eotaxin precursor - inmediate-early serum immune activation gen l-aminocyclopropane-1	DINA DINGLING PLOCES
148147 C60407 153497 153497 153416 A30516 A31767 181182 G01540 102478 146730 S56695 A35516 F64075 C35387 VART	A34444
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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28
20020000000000000000000000000000000000	45

ALIGNMENTS

	A37034 #type complete interleukin-8 precursor - human		<pre>#formal_name Homo sapiens #common_name man 08-Dec-1992 #sequence_revision 08-Dec-1992 #text_change</pre>	17-Mar-1999 A37034, JL0014, A32791; S37634; PL0107; A28598; A27488; A39960; A60401; A60591; S15827; S04216; A60567; A60847; S15417; S03975; I54560; I55992; I37902; S67519	A37034	Mukaida, N.; Shiroo, M.; Matsushima, N.	J. Immunot. (1907) 143:1300 1371 Genomic structure of the human monocyte-derived neutrophil	chemotactic factor IL-8. #cross-references MUID:89309826	A37034	###OCCUPING TANK DNA	ss 1-99 ##label MUK	##cross-references GB:M28130; NID:g186367; PID:g186368		JL0041	Matsushima, K.; Morishita, K.; Yoshimura, T.; Lavu, S.; Kobayashi, Y.; Lew, W.; Appella, E.; Kung, H.F.; Leonard, E.J.; Oppenheim, J.J.	J. Exp. Med. (1988) 167:1883-1893	Molecular Louising of a mannar months of molecular control of MDNCF mRNA chemotactic factor (MDNCF) and the induction of MDNCF mRNA by interleukin 1 and tumor necrosis factor.	#cross-references MUID:88258376	JL0041	_type	ferenc	the sequence shows similarity to several platelet-derived factors, a v-src-induced protein, a growth-regulated gene product (gro), and an IFN-gamma-inducible protein	A32791 Kowalski, J.; Denhardt, D.T. Mol. Cell. Biol. (1988) 9:1946-1957 Regulation of the mRNA for monocyte-derived
6 1117		ALTERNATE_NAMES	ORGANISM DATE	ACCESSIONS	REFERENCE	#authors	#journal #title	#CTOSS-Yefe.	# CTC C B B B B B B B B B B B B B B B B B	104 CE##	##residues	##CLOSS-	##note	REFERENCE	#authors	#journal	#title	#cross-refe	#accession	##MOTECT	##residues	### # 100 C C C C C C C C C C C C C C C C C C	REFERENCE #authors #journal #title

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#journal J. Exp. Med. (1989) 169:1895-1901
#title Driftication and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human #cross-references MUD:89279141
#accession PLO107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W.C.; Christophers, E. J. Immunol. (1990) 144:2223-2232 IL-lalpha or tumor necrosis factor-alpha stimulate release of three NAP-1/IL-8-related neutrophil chemotactic proteins in human dermal fibroblasts.
                                                                                                                                                                                                                                                                                                                                                                                  Suzuki, K.; Miyasaka, H.; Ota, H.; Yamakawa, Y.; Tagawa, M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yoshimura, T.; Matsushima, K.; Tanaka, S.; Robinson, E.A.; Appella, E.; Oppenheim, J.J.; Leonard, E.J. Proc. Natl. Acad. Sci. U.S.A. (1987) 84.9233-9237 Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence similarity to other host defense cytokines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schroeder, J.M.; Sticherling, M.; Henneicke, H.H.; Preissner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ##molecule_type protein
##residues 23-32 ##label SCH
##experimental_source dermal fibroblasts
##note a minor component of this material (15%) includes an
additional two amino acids at the amino end
                                                                                                                                                                                      King, C.H.; Gordon, G.S.; Konieczkowski, M.; Sedor, J.R. submitted to the EMBL Data Library, February 1992 837634
neutrophil-activating peptide in differentiating HL60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #authors Walz, A.; Peveri, P.; Aschauer, H.; Baggiolini, M.
#journal Biochem. Biophys. Res. Commun. (1987) 149:755-761
#title purification and amino acid sequencing of NAF, a novel neutrophil-activating factor produced by monocytes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gregory, H.; Young, J.; Schroeder, J.M.; Mrowietz, U.;
Christophers, E.
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#title structure determination of a human lymphocyte derived
#cross references WUID:88162914
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##residues 23-32,'XR',35,'X',37-52,'L',54 ##label SUZ
##experimental_source lung giant cell carcinoma LU65C
SNCE A28598
                                                                                                               ##cross-references EMBL:211686; NID:933958; PID:933959
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##residues 28-59 ##label WAL
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##residues 28-99 ##label GRE
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##residues 1-97 ##label KIN
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                                                #cross-references MUID:89313739
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#accession A39960
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Opdenakker, G.; Billiau, A. Eur. J. Immunol. (1989) 19:1189-1194
The chemotactic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived
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MOL. Immunol. (1989) 26:87-93
#title Three forms of monocyte-derived neutrophil chemotactic factor amino-terminal sequence.
#cross-references MUD:89181632
#accession A60567
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#journal J. Exp. Med. (1988) 167:1364-1376
#title A novel, WI-2-terminal sequence-characterized human monokine
possessing neutrophil chemotactic, skin-reactive, and
granulocytosis-promoting activity.
#cross-references_MID:88187604
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Biochem. J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion of groprotein and a neutrophil chemotactic factor but not beta-z--microglobulin in human synovial cells and
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the forms starting from positions 21, 23, and 28
represented 8%, 47%, and 45%, respectively, of total interleukin.8
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Biochem. J. (1991) 275:881-584
Formation of neutrophil-activating peptide 2 from
platelet-derived connective-tissue-activating peptide III
by different tissue proteinases.
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                                                                                                                                                                                                                                                 #authors Nakagawa, H.; Hatakeyama, S.; Ikesue, A.; Miyai, H.
#journal FBBS Lett. (1991) 282:412-414
#title Generation of interleukin-8 by plasmin from
AVLPR-interleukin-8, the human fibroblast-derived
#cross-references MIDD:91243843
#accession 515827
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Purification of granulocyte chemotae
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##molecule_type protein
21-67 ##label VA2
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##residues 28-99 ##label CAR
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Query Match
Best Local Similarity 83.3%;
Matches 10; Conservative
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J. Immunol. (1991) 146:3483-3488
Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their
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Blaun, J.; Waterfield, M.D.; Williams, T.J.
Blochem. J. (1990) 271:/97-801
#title hovel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity in vivo. Purification, partial amino acid sequence and structural relationship to interleukin 8.
#accession S13052
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                                                                         Hotta, K.; Hayashi, K.; Ishikawa, J.; Tagawa, M.; Hashimoto, K.; Mizumo, S.; Suzuki, K.
Immunol. Lett. (1990) 24:165-170
                                                                                                                                Coding region structure of interleukin-8 gene of human lung
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19-May-1994 #sequence_revision 19-May-1994 #text_change
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##cross-references GB:M57439; NID:g165552; PID:g165553
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interleukin-8 - dog
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interleukin-8 - rabbit
                               ##molecule_type protein
##residues 23-46 ##label GOL
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#authors Seow, H.F.; Yoshimura, T.; Wood, P.R.; Colditz, I.G.
#journal Immunol. Cell Biol. (1994) 72:398-405
#title Skin of covine interleukin-8
#cross-references MUID:95137691
#accession 146997
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Ishikawa, J.; Suzuki, S.; Hotta, K.; Hirota, Y.; Mizuno, S.; Suzuki, K...
                                                                                                                                                                                                                             This protein is a polymorphonuclear leukocyles chemotactic factor and is involved in the host defense function.
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06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
09-May-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interleukin 8 - sheep
#formal_name Ovis orientalis aries, Ovis ammon aries
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#length 101 #molecular-weight 11292 #checksum 294
                                                                                                                                                                                                                                                                                                                                   #superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611 #checksum 3157
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                                   #journal Gene (1993) 131:305-306
#title Cloning of a canine gene homologous to the human interleukin-8-encoding gene.
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88.9%; Score 88; DB 2; Length 101;

Best Local Similarity 83.3%; Pred. No. 3.72e-06;

Matches 10; Conservative 2; Mismatches 0; Indels
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Pred. No. 3.72e-06;
2; Mismatches 0; Indels
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##cross-references GB:S74436; NID:9786590; PID:9786591
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1-8 - sheep
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##residues 1-95 ##label ISH
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#title Molecular cloning of portine liveolar macrophage-derived netrophil chemotactic factors I and II; identification of portine IL-8 and another intercrine-alpha protein.
                                                                                                                                                                                                                                                                                                                                                           interleukin-8 homolog - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goodman, R.B.; Foster, D.C.; Mathewes, S.L.; Osborn, S.G.;
Kuijper, J.L.; Forstrom, J.W.; Martin, T.R.
Blochemistry (1992) 31:10483-10490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, M.J.; Weiss, D.J.; Murtaugh, M.P.
J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ##molecule_type mRNA; protein
##residues 1-103 ##label GOO
##experimental_source alveolar macrophage
##note sequence extracted from NCBI backbone (NCBIN:117415,
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                             ##Crossreferences EMBL:X78306; NID:9463253; PID:9463254
CLASSIFICATION #superfamily beta-thromboglobulin #length 101 #molecular-weight 11292 #checksum 294
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*length 103 *molecular-weight 11677 *checksum 8904
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Pred. No. 3.72e-06;
2; Mismatches 0; Indels
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##molecule_type mRNA
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Matches 10; Conservative
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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J. Immunol. (1993) 151:6225-6236
cDNA cloning and expression of guinea pig neutrophil
attractant protein-1 (NAP-1): NAP-1 is highly conserved in
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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Blochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
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#length 99 #molecular-weight 11114 #checksum 9401
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Pred. No. 1.63e-05;
2; Mismatches 1; Indels
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Pred. No. 1.14e-04;
2; Mismatches 1; Indels
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##cross-references GB:L04986; NID:9459764; PID:9459765
      Score 88; DB 2; Louis Pred. No. 3.72e-06;
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#cross-references MUID:94065176
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Matches 10; Conservative
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The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E. Shyy, Y.J.; Li, Y.S.; Commun. (1990) 169:346-351 Structure of human monocyte chemotactic protein gene and its regulation by TPA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 monocyte chemoatractant protein 1 precursor - human GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1; monocyte chemotactic factor 1; monocyte secretory protein; tumor-derived chemotactic factor glioma-derived chemotactic factor 2 (GDCF-2) #formal_name Homo sapiens #common_name man 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #domain signal sequence #status predicted #label SIG\
                                                                                                                                                                                  Wempe, F.; Henschen, A.; Scheit, K.H.

DNA Cell Biol. (1991) 10:671-679

Gene expression and cDNA cloning identified a major basic
protein constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).
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predicted #label MAT\
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predicted
                             monocyte chemoattractant protein 1 precursor - bovine monocyte chemotactic factor 1; seminal plasma protein P6 #formal_name Bos primigenius taurus #common_name cattle 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
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cession B39296
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   experimental source seminal vesicle (CATION *superfamily macrophage inflammatory protein glycoprotein
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##residues 1-99 ##label SHY
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##molecule_type mRNA
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#journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A chemoattractant expressed in human sarcoma cells (timor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and
                                                                               #authors Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
#journal FEBS Lett. (1989) 244:487-493
#title Chemoattractant protein-1 (MCP-1). Full-length compared chemoattractant protein-1 (MCP-1). Full-length componuclear leukcytes, and sequence similarity to mouse competence gene JE.
#cross-references MUID:89153605
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##cross-references GB:M30816; GB:M31625; GB:M31626; NID:g188701;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Yoshimura, T.; Leonard, E.J.
#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references MUID:92095166
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##cross-references GB:S71513; NID:9240867; PID:9240868
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##residues 29-33,'xx',36-52;82-92 ##label DEC
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##residues /x',25-99 ##label ROB
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##residues 1-99 ##label FUR
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experimental #label MAT\
#product monocyte chemoattractant protein 1, short form
                Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukdy, P.E.
Mol. Cell. Biochem. (1993) 126:61-68
The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
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#modified_site pyrrolidone carboxylic acid (Gln) (in
mature form) #status experimental\
#binding_site carbohydrate (Asn) (covalent) #status
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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                                                                                                                                                                                                                                                                                Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F. Chinese J. Microbiol. Immunol. (1994) 14:29-32 The PCR, cloning and sequencing of human monocyte
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##molecule_type mRNA
##residues
1-02 ##1."
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Pred. No. 1.96e-03;
3; Mismatches 1; Indels
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Pred. No. 3.12e-03;
2; Mismatches 2; Indels
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#residues 1-99 ##label LIY
#ercoss-references GB:S69738; NID:g545464; PID:g545465
NCE 01096
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#map_position 17q11.2-17q12
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Local Similarity 66.7%;
les 8; Conservative
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larity 66.7%;
Conservative
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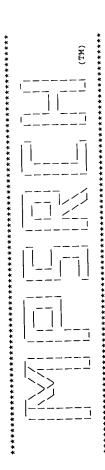
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#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84:6715-6719

Constitutive expression of a gene encoding a polypeptide homologous to biologically active human platelet protein in Rous sarcome virus-transformed fibroblasts virus transformed fibroblasts.

#cross-references MUID:88016162
                                                                                                                                                                                                                                                       monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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Biochem. Biophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
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#length 99 #molecular-weight 10976 #checkeum 0768
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RSV-induced protein - chicken
#formal_name Gallus gallus #common_name chicken
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FICATION #superfamily macrophage inflammatory protein
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                                                                                                                                                                                                                                                                                                                                                                                                                       #authors Sugano, S.; Stoeckle, M.Y.; Hanafusa, H.
#journal Cell (1987) 49:321-328
#title Transformation by Rous sarcoma virus induces a novel gene
with homology to a mitogenic platelet protein.
#cross-references WUD:87187628
#accession A26736
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transformation-induced protein precursor (clone 9E3) -
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#formal_name Gallus gallus #common_name chicken
19.Nov-1988 #sequence_revision 19.Nov-1988 #text_change
20.Mar-1998
A26736
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Query Match 72.7%; Score 72; DB 2; Length 103; Best Local Similarity 66.7%; Pred. No. 7.83e-03; Matches 8; Conservative 1; Mismatches 3; Indels
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##cross-references GB:M16199; NID:g211735; PID:g211736
CLASSIFICATION #superfamily beta-thromboglobulin
KEYWORDS growth factor
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| ELCLDPKENWVQ 12
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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:08:12 2000; MasPar time 3.54 Seconds 72.129 Million cell updates/sec

rabular output not generated.

(1-12) from US09150813.pep Description: Perfect Score: Title:

1 ELCLDPKENWVO 12 Sequence:

PAM 150 Gap 15

Scoring table:

170751 segs, 21266608 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

i.partj 2.part2 3.part3 4.part4 5.part5 6.part6 7.part7 8.part8 9.part9 10.part10 11.part11 12.part12 13.part13 14.part14 15.part15 16.part16 17.part17 18.part18 19.part19 20.part20 21.part20 22.part22 23.part22 26.part26 27.part27 28.part28 29.part29 30.part30 31.part31 32.part37 38.part38 34.part34 35.part35 36.part36 37.part37 38.part38 a-geneseq35 Database:

39:part39

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. SUMMARIES

Mean 18.854; Variance 67.209; scale 0.281

Statistics:

	Pred. No.	7.23e-03	7.23e-03	230-03		7.23e-U3	7.23e-03	7.23e-03	7 230-03) :	7.23e-03	7.23e-03	20-056 6	ב ב ב ב	7.236-03	7.23e-03	236-03		7.23e-U3	.23e-03	220-02	מסום מס
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0	Human interleukin-6.	Soluble interleukin-6	Chemokine-like protei	Human neutrophil chem	te	īŗ.	g solub	Mutant human IL-8, R4	ukin(1-72) p	Mutant human IL-8, Yl	euk	Chemokine-like protei	Sequence of a synthet	Human neutrophil chem	Chemokine-like protei	phi	Chemokine-like protei	Chemokine-like protei		Chemokine-like protei	Chemokine-like protei	ž	Human neutrophil acti	Interleukin-8/NAP-1.	Human neutrophil chem		+ human IIR	indiana.	ò
W26204	R88057	R70183	R99812	R03166	R99804	W25709	W70289	W25701	W04516	W25714	R38080	R99803	P90913	R03615	R99806	P90078			R99814	R99818	R99815	10	P90017	R70795	~	ı u) (0 :	W25711
24	\leftarrow	$\overline{}$	2		2	(3.5	Š	10	ľ		20					2	2	10	٠,	10			,	•		•		
72	72	72	72	72	72	7.2	7.2	7.2	100	7.2	7.5	72	72	7.2	7.2	7 .	7.3	7.3	7.0			77	77	. 6	0	, 6	ייי	_	7
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66	66	66	66	0	0	0	0	0	<i>u</i> c	0	n 0	0	0	0	0	0	0	0	0	<i>y</i> c	y 0	0	0	0	0 0	א ט ע	y	96	92
17	18	19	20	9 5	110	4 6	2.4	# J C	0,7	0 10	/7	000	V 6	0,0	100	7 0	000	, c	7 4	0 10	750	0 0) -) r	⊣ (7 7	43	44	45

ALIGNMENTS

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Gaps
                                                                                                                                                                                                   which we peptide inhibitors of neutrophil activating factor - which inhibit chemotaxis, for treating adult respiratory distress syndrome and other inflammatory lesions caused by NAF claim 8; Column 9; Lipp; English.

NAF(44-75) is a preferred peptide derived from NAF which is nartagonistic to NAF and has no chemotactic activity. It inhibited NAF-induced migration by 34 per cent. When used with a second preferred peptide, i.e. NAF(3-25) (see R20236) inhibition was 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W04515;
30-JUL-1997 (first entry)
Interleukin-8(34-72) used in novel synthesis method.
Thioester; synthesis; ligation; catalysis; thiol; condensation;
                                                                                                                                                                                                                                                                                                                                                                                                              ö
                             R20237;
01-MAY-1992 (first entry)
NAF(44-72) peptide inhibitor of neutrophil activating factor.
NaF(44-72) peptide inhibitor of neutrophil chemotaxis; ARDS.
                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                             Score 99; DB 4; Length 29; Pred. No. 7.23e-03;
                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                       07-JAN-1992.
05-FEB-1990; 475658.
05-FEB-1990; US-475658.
(TEXA ) UNIV OF TEXAS SYST.
Cohen AB, Miller EJ, Nagao S, Carr FK;
WPI: 92-041038405.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W04515 standard; peptide; 39 AA.
           Ā
r
R20237 standard; Protein; 29
                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100.0%;
les 12; Conservation
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                                                                                         Synthetic.
US5079228-A.
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Matches
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Fig. 20 yoursely, you.

Synthesis of protein by chemical ligation of unprotected peptide(s)

Py reaction of N-terminal Cys with C-terminal thioester and

Py reaction of N-terminal Cys with C-terminal thioester and

Example 3; Page 47; 61pp; English

The present peptide, which has an amino-terminal cysteine residue,

The present peptide, which has an amino-terminal cysteine residue,

The present peptide (OP) to a 2nd OP, end to end, to produce an OP

Stoduct. This comprises mixing the 1st and 2nd OP (which have a product. This comprises mixing the 1st and 2nd OP (which have a carboxy-terminal thioester and an amino-terminal Cys with an unoxidised SH side chain) in a solution containing a catalytic of thiol, condensing the terminal groups to form an intermediate OP,

The method can be used for the production of full length proteins, which can be made into native, disulphade containing proteins by compressing the size of protein that can be made by chemical companies chamoselective, compensation that can be made by chemical can be made into native, and the native peptide bond formation, with native peptide bond formation, companies chamoselective, contens the components are size of protein that can be made by chemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 23; Page 30; 47pp; English.
The sequence is that of an analogue of interleukin-8 (IL-8) comprising residues 3-69. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat at inflammation, e.g. by intravenous injection or oral admin. It can inflammatory response.
Sequence 67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 99; L. L. Pred. No. 7.23e-03;

Pred. No. 7.23e-03;

Output

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Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
link; beta-aminothioester; bond; amide; production; disulphide; refolding; oxidisation; interleukin 8; IL-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 99; DB 22; Length 39;
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Pred. No. 7.23e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                              04-MAY-1995; WO-U05668.
(SCRI ) SCRIPPS RES INST.
Dawson PE, Kent SBH, Muir TW;
WPI; 96-506095/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R38087 standard; protein; 67 AA.
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04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 100.0%;
Local Similarity 100.0%;
les 12; Conservative
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Best Local Similarity 100.0%;
Matches 12; Conservative
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WPI; 93-196997/24.
                                                                                                                                                                        04-MAY-1995; U05668
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                                                                                                  WO9634878-A1.
                                                                                                                                       07-NOV-1996.
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New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation claim 19; Page 29; 47pp; English.

The Sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues 6-72. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat act as a neutrophil eact as a neutrophil activator and so can be used to stimulate an inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for treatment of inflammation

Claim 17: Page 29: 47pp: English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising to a residues 5-72: It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can at a neutrophil activator and so can be used to stimulate an inflammatory response. It also has strong chemotaxis activity and sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clark-Lewis I, Moser B, WPI: 93-196997/24.

New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                              13-OCT-1993 (first entry)
Modified human interleukin-8 analogue (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified human interleukin-8 analogue (5-72).

Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
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0
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Pred. No. 7.23e-03;
0; Mismatches 0; Indels
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Pred. No. 7.23e-03;
...matches 0; Indels
                                                                                 R38086 standard; protein; 67 AA.
                                                                                                                                                                                                                                                                        04-DEC-1991; US-801578.

(BIOM-) BIOMEDICAL RES CENT LTD.

Clark-Lewis I, Moser B;

WPI: 93-196997/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R38085 standard; protein; 68 AA.
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03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
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Local Similarity 100.0%;
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Matches 12; Conservative
1 ELCLDPKENWVQ 12
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03-DEC-1992; CA0528.
04-DEC-1991; US-8015
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                                                                                                   R38086;
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Gaps

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46 elcldpkenwvg 57

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Local Similarity 100.0%; es 12; Conservati
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                                                    Query Match
Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Clark-Lewis I, Moser B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26
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                                                                                                                            44 elcldpkenwvg 55
                                                                                                                                               1 ELCLDPKENWVQ 12
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                                Seguence
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The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues Gln5 (6-72). It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 15; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues IL-8 (6-72). It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an
                                                                                                                                                                                                                                                                                                                                                                                                                        neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Modified human interleukin-8 analogue Gln5 (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
                                                                                                                                                  13-0cT-1993 (first entry)
Modified human interleukin-8 analogue Ile5 (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis;
                                                                                                                                                                                                                                                                                                                                                                                                       New interleukin-8 analogues modified in specified region - used as
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Pred. No. 7.23e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                              activity; stimulation; inflammatory response.
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                                                                                                                                                                                                                                                                               /note= "Leu5 -> Ile"
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                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R38084 standard; protein; 68 AA.
                                                                                                                                                                                                                                                                                                                                           04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
Clark-Lewis I, Moser B;
WPI; 93-196997/24.
                                                                                                      T 6
R38083 standard; protein; 68 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
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WPI; 93-196997/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammatory response.
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                       44 elcldpkenwvg 55
                                        1 ELCLDPKENWVQ 12
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03-DEC-1992; CA0528.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 AA;
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New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation for treatment of inflammation. The sequence 19; 47pp; English. The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues 4-72. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an inflammatory response. Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clark-Lewis I, Moser B;
WPI; 93-19697/24
New interleukin-8 analogues modified in specified region - used as
New interleukin-8 analogues for blocking effect of IL-8 on neutrophil(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified human interleukin-8 analogue Ala4Ala5 (6-72).
Analogues; modified; neutrophil activators; antagonists; human;
competitive antagonist; IL-8; inflammation; treatment; chemotaxis;
                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified human interleukin-8 analogue (4-72). Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
act as a neutrophil activator and so can be used to stimulate an inflammatory response. Sequence -68\ \mathrm{AA};
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 99; DB 7; Length 69; Pred. No. 7.23e-03;
                                                                                                                                                                                             0; Indels
                                                                                                                            Length 68;
                                                                                                                                Score 99; DB 7; L
Pred. No. 7.23e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      activity; stimulation; inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Glu4 -> Ala"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "Leu5 -> Ala"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-JUN-1993.
03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R38082 standard; protein; 69 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
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                Claim 10; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising The sequence is that of an analogue of interleukin-8 (IL-8) comprising as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an inflammatory response.
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-WAR-1997 (first entry)
Chemokine-like protein IL-8M8.
Human; chemokine: IL-8M8; interleukin-8; mutant; active domain;
interleukin-8-antagonist; myelosuppressive; cytostatic; antitumour;
leukeamia; polycythaemia vera; hypermakaryocytopoiesis; therapy;
diagnostic; myeloid progenitor cell; expansion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note= "Mutated active domain (R99826, claim 5)"
                                                                                                                                                                                                                                                                                                                                    ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Conserved sequence (R99824, claim 1)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Interleukin-8 active domain (R92319,
                                                                                                                                                                                                                                                                       Score 99; DB 7; Length 69;
Pred. No. 7.23e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R99805 standard; peptide; 72 AA.
treatment of inflammation
                                                                                                                                                                                                                                                                    Ouery Match
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            claim 30)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1995; US-482111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-OCT-1994; US-330163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (REPK ) REPLIGEN CORP.
Daly TJ, Larosa GJ;
                                                                                                                                                                                                                                                                                                                                                                      45 elcldpkenwvg 56
                                                                                                                                                                                                                                                                                                                                                                                                       1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-1995; U13897
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WPI; 96-239500/24.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_difference 50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R99805;
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                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  factor and treat inflammation
Claim 1: Column 4: 8pp: English.
A novel antibody, preferably a monoclonal Ab (MAb), has specific
binding affinity for a neutrophil chemotactic factor (NCF) having
the present amino-terminal sequence. The MAb can be used to
quantify, detect or localise the NCF in a sample, and treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anti-neutrophil chemotactic factor antibody - useful to assay for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-NOV-1990 (first entry)
Sequence of a synthetic neutrophil chemotactic polypeptide (NCF)
Inflammation; anti-neutrophil chemotactic polypeptide antibody.
 or to detect, isolate and expand progenitor cells ex vivo for transplantation. The protein does not show adverse neutrophil activation or inflammatory side-effects.
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                                                                               Score 99; DB 20; Length 72;
Pred. No. 7.23e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                              Neutrophil chemotactic factor amino-terminal peptide. Antibody; monoclonal; neutrophil chemotactic factor; amino-terminal; quantification; detection; localisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 99; DB 27; Length 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 7.23e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hoshimura I, Leonard EJ, Oppenheim L,
                                                                                                                                                                                                                                                                                                                                                               USSUGATION 1995, 467612.

R 16-MAR.1995; 467612.

R 06-JUN.1995; US-467612.

R 06-JUN.1995; US-467612.

A (USSH) US DEPT HEALTH & HUMAN SERVICES.

PP Appella E, Leonard EJ, Matsushima K, Oppenheim J, Leonard EJ, Matsushima K, Oppenheim J, Leonard EJ, Matsushima T, Leonard EJ, Yoshimura T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic neutrophil chemo:tactic factor
                                                                                                                                                                                                                                 W41519 standard; peptide; 72 AA. W41519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T 12
P81838 standard; peptide; 72 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-MAR-1988; 169033.
16-MAR-1988; US-169033.
(USSH) US DEPT HEALTH & HUMAN.
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                                                                             Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                  14-APR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                 treatment; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammatory conditions.
                                                                                                                                        48 elcldpkenwvg 59
                                                                                                                                                              1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         elcldpkenwvg 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 ELCLDPKENWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matsushima K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-SEP-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      conditions.
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Claim 1; Page 35; 40pp; English.
The sequences given in W25701-14 represent interleukin-8 (IL-8) mutants which are capable of binding to IL-8 receptors. They can be used for modulating an IL-8 receptor-mediated biological response.
The mutantions were introduced into the human IL-8 coding sequence by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mutant human IL-8, S14Q.
Interleukin-8; IL-8; IL-8 receptor-mediated biological response;
mutant; IL-8 receptor; overlap PCR.
                                                                                                                                                              17-OCT-1997 (first entry)
Mutant human II-8, F21N.
Interleukin-8; IL-8, IL-8 receptor-mediated biological response;
mutant; IL-8 receptor; overlap PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New mutant interleukin-8 poly:peptide(s) - used for modulating interleukin-8 receptor-mediated biological responses.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
 Length 72;
                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shyamala V, Siani M, Tekamp-Olson P;
                                                                                                                                                                                                                                                                                                18-JUN-1996; U10537

05-APR-1996; US-628455.

20-JUN-1995; US-002774.

18-OCT-1995; US-005385.

(CHIR.) CHIRON CORP.

Blancy J. Shyamala V, Siani M, Tekamp-Olson P; Wernette-Hammond ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 99; DB 23; 1
Pred. No. 7.23e-03;
0; Mismatches 0;
Score 99; DB 26; I
Pred. No. 7.23e-03;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 I 14
W25708 standard; protein; 72 AA.
                                                                                                                          JT 13
W25713 standard; protein; 72 AA.
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                                                                                                                                                                                                                                                       /label= F21N
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Local Similarity 100.0%;
les 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-OCT-1997 (first entry)
  Query Match
Best Local Similarity 100.0%;
Matches 12; Conservative
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20-JUN-1995; US-002774.
18-OCT-1995; US-005385.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wernette-Hammond ME;
WPI; 97-087095/08.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48 elcldpkenwvg 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-JAN-1997.
18-JUN-1996; U10537.
                                                        48 elcldpkenwvg 59
                                                                       1 ELCLDPKENWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_difference 14
                                                                                                                                                                                                                                                                                                                                                                                               WPI; 97-087095/08.
                                                                                                                                                                                                                                             misc_difference 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                         WO9700601-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      overlap PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Blaney J,
                                                                                                                                                                                                                                                                                       09-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                      W25713;
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Claim 1; Page 35; 40pp; English.

The sequences given in W25701-14 represent interleukin-8 (IL-8) mutants which are capable of binding to IL-8 receptors. They can be used for modulating an IL-8 receptor-mediated biological response. The mutations were introduced into the human IL-8 coding sequence by
Claim 1; Page 35; 40pp; English.

The sequences given in W25701-14 represent interleukin-8 (IL-8)
mutants which are capable of binding to IL-8 receptors. They can
be used for modulating an IL-8 receptor-mediated biological response.

The mutations were introduced into the human IL-8 coding sequence by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                         Mutant human IL-8, D45R.
Interleukin-8; IL-8; IL-8 receptor-mediated biological response;
mutant; IL-8 receptor; overlap PCR.
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Pred. No. 7.23e-03;
0; Mismatches 0; Indels
                                                                                                                               Length 72;
                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CHIR ) CHIRON CORP.
Blaney J, Shyamala V, Siani M, Tekamp-Olson P;
Wernette-Hammond ME;
WPI, 97-087095/08.
                                                                                                                               Score 99; DB 23; I
Pred. No. 7.23e-03;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search completed: Fri Feb 4 17:08:32 2000
                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                              JT 15
W25710 standard; protein; 72 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= D45R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.0%;
Matches 12; Conservation
                                                                                                                                 Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                            W25710;
17-0CT-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-JAN-1997.
18-JUN-1996; U10537.
05-APR-1996; US-628455.
20-JUN-1995; US-002774.
18-OCT-1995; US-005385.
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在各种的工作,是是这种的人,我们的一种的人,也是有的人的人,也是有的人,也是有一种的人,也是有一种的人,也是有的人的人,他们也不是有的人的人,也是有的人的人的		**************************************
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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:15:49 2000; MasPar time 3.23 Seconds 105.016 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-41 (1-12) from US09150813.pep 92 Description: Perfect Score:

1 EICLDPEAPFLK 12 Sequence: 77977 seqs, 28268293 residues Searched:

PAM 150 Gap 15

Scoring table:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

swiss-prot37 1:swissprot

Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 25.651; Variance 29.190; scale 0.879

SUMMARIES

Pred. No.	3.75e-10	9.29e-09	2.78e-05	2.90e-04	1.61e-03	2.83e - 03	1.49e - 02	1.49e - 02	1.49e - 02	2.57e-02	2.57e-02	2.57e-02	7.50e-02	7.50e-02	7.50e-02	7.50e-02	7.50e-02	7.50e-02	1.27e-01	2.14e-01	2.14e-01	2.14e-01	2.14e-01
Description	NEUTROPHIL ACTIVATING	GRANULOCYTE CHEMOTACTI	GRANULOCYTE CHEMOTACTI	CYTOKINE LIX PRECURSOR	ALVEOLAR MACROPHAGE CH	CYTOKINE LIX PRECURSOR	MACROPHAGE INFLAMMATOR	PLATELET BASIC PROTEIN	HYPOTHETICAL PROTEIN K	GROWTH REGULATED PROTE	PLATELET BASIC PROTEIN	DEOXYRIBOSE-PHOSPHATE	MACROPHAGE INFLAMMATOR	GROWTH REGULATED PROTE	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR	GROWTH REGULATED PROTE	GROWTH REGULATED PROTE	HYPOTHETICAL 68.6 KD P	GROWTH REGULATED PROTE	GROWTH REGULATED PROTE	Д	HYPOTHETICAL 13.1 KD P
ΙD	EN78 HIMAN	GCP2 HUMAN	GCP2_BOVIN	LIX_MOUSE	AMC2_PIG	LIX RAT	MIP2 RAT	PF4L_PIG	Y133 HUMAN	GROG BOVIN	PF4L HUMAN	DEOC_SYNY3	MI2A RAT	GRO MOUSE	MIP2 MOUSE	MI2B_RAT	GROA_BOVIN	GROB BOVIN	YAOA SCHPO	GRO RAT	GRO CAVPO	GROZ_RABIT	YOGR_BPT4
DB	-	-	٦,	-1	Н	H	Н	П	Н	-	н	Н	-	-	-	Н	Н	-	-	Н	-	Н	-
Length 1	114	114	75	132	117	130	100	119	1524	86	128	225	68	96	100	100	104	104	599	96	104	104	111
Query Match 1	000	94.6	80.4	76.1	72.8	71.7	68.5	68.5	5.83	67.4	67.4	67.4	65.2	65.2	65.2	65.2	65.2	65.2	64.1	63.0	63.0	63.0	63.0
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ALIGNMENTS

AA.	S) ATE) JRSOR.	MAMMALIA; EUTHERIA;	LLS T.N.C.; the neutrophil-activating	SIMONET S.; the human neutrophil-activating 94).	14) MEDLINE, 95091791. MEDLINE, 95091791. CORRETT M.S., SCHWITT I., RIESS O., WALZ A.; —Characterization of the gene for human neutrophil-activating peptide 78 (ENA-78); BIOCHEM. BIOPHYS. RES. COMMUN. 205:612-617(1994).	M., KUNKEL S.L.,	STRIETER R.M.; "Structure and neutrophil-activating properties of a novel "Structure and neutrophil-activating properties of a novel inflammatory peptide (ENA-78) with homology to interleukin 8."; j. EXP. MED. 174.1355-1362(1991)!- ENDCTION: INVOLVED IN NEUTROPHIL ACTIVATION!- SINILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).	It is produced through a collabora informatics and the EMBL outstati
114 4	PDATE PRECE	RATA; D.	WEL ing t	SIMONET the huma	WALZ man n 12-61	LINI	propromold ACT	It is
PRT;	CREATED) LAST SEQUENCE UPDATE) LAST ANNOTATION UPDATE) PROTEIN ENA-78 PRECURSOR	GCCB5 OR ENA'8. HOMO SAPIENS EUKRARYOTE, METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; PRIMATES; CATARRHINI; HOMINIDAE; HOMO.	BRAWAND C., WELLS CDNA encoding the platelets.";	0	RIESS O., gene for hu	.A. B., BAGGIOLINI M.,	ETER R.M.; ucture and neutrophil-activating properties ucture and neutrophil-activating properties sap. MED. 174:1355-1363(1991). FUNCITON: INVOLVED IN NEUTROPHIL ACTIVATION SIMILARITY: BELONGS TO THE INTERCRINE ALPHA C-X-C) (CHEMOKINE CXC).	SWISS-PROT entry is copyright. It is prodiced the Swiss Institute of Bioinformatics
STANDARD;). CHORD? I; HOM]	29887. 29887. FURNESS R.B., a full-length 78 from human 3-334(1994).	J., B. teriza ne."; 25277-	ITT I., RIESS of the gene : RES. COMMUN.	43-114 FROM N.A HELIUM; 178844. KGENER R., CAR B	ETER R.M.; ucture and neutrophil-ac ammatory peptide (ENA-78 XP. MED. 174:1355-1362(; XP. MED. 174:1355-1362(; XP. SINILARITY: BELONGS TO (SIMILARITY: BELONGS TO (C-X-C) (CHEMOKINE CXC).	try is Instit
STANI	(REL. 3% (REL. 3% (REL. 3% CTIVATI)	OR ENA78. SAPIENS (HUMAN) YOTA; METAZOA; TES; CATARRHINI	95129887. A., FURNESS of a full- SNA-78 from	N.A. 4315. CNINCH Charac 78) ge	FROM N.A. 95091791. I.S., SCHMI rrization c 8).";	OF 43-114 FRC ITHELIUM; 92078844. BURGENER R.,	peptic 174:13 INVOI	Swiss
N N	995 (1 995 (1 997 (1 IL ACT	ENA78 IENS A; ME7	FROM 9512 A., Fl of a ENA-7:	FROM 9501 S., M and (ENA-	FROM 9509 M.S., eriza 78)."	S OF 4 SPITHE 9207	R R.M. LICE ar atory MED. CTION: ILARIT	ISS-Pl
T 1 EN78_HUMAN	P42830; 01-NOV-1995 (REL. 32, 01-NOV-1995 (REL. 32, 01-NOV-1997 (REL. 35, NEUTROPHIL ACTIVATING	SCYB5 OR ENA78. HOMO SAPIENS (H EUKARYOTA; META PRIMATES; CATAR	SEQUENCE FROM N.A. MEDLINE; 95129887. POWER C.A., FURNESS R.B., "Cloning of a full-length peptide ENA-78 from human GENE 151:333-334(1994).	SEQUENCE FROM N.A. MEDLINE; 95014315. CHANG M.S., MONINCH J., BASU R., Cloning and characterization of peptide (ENA-78) gene.", J. BIOL. CHEM. 269:25277-25282(1	SEQUENCE FROM N.A. MEDLINE, 95091791. CORBETT M.S., SCHW "Characterization 78 (ENA-78).";	[4] SEQUENCE OF 43-114 TISSUE=EPITHELIUM; MEDLINE; 92078844. WALZ A., BURGENER	STRIETER R.M.; "Structure and inflammatory p J. EXP. MED. 1 -!- FUNTION: -!- SIMILARITY -X-C-X-C) (CH	This SWIS
RESULT ID E	DT DT DE	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RN RX RA RT	RN RX RT RT	RN RX RA RT RL	RN RX RA	R R R R C C C C C C C C C C C C C C C C	ទូខូខូ

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the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- FUNCTION: CHEMOTACTIC FOR NEUTROPHIL GRANULOCYTES.
-!- SUBCELLULAR LOCATION: SECRETED.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROOST P., DE WOLF-PEETERS C., CONINGS R., OPDENAKKER G., BILLIAU A., VAN DAMME J.;
"Identification of a novel granulocyte chemotactic protein (GCP-2) from human tumor cells. In vitro and in vivo comparison with natural J. IMMUNOL. 155:1000-1010(1993).
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROOST P., WUYIS A., CONINGS R., LENAERTS J.-P., BILLIAU A., OPDENAKER G., VAN DAMME J.;
"Human and bovine granulocyte chemotactic protein-2: complete acid sequence and functional characterization as chemokines.";
BIOCHEMISTRY 32:10170-10177(1993).
                                                                                                                                                                                                            POTENTIAL.
NEUTROPHIL ACTIVATING PROTEIN ENA-78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 38-114 FROM N.A. FROYEN G., PROSEN G., PROSEN G., PROSEN G., PROSEN G., VAN DAMME J., BILLIAU A.; SUBMITTED (JAN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                  Score 92; DB 1; Length 114; Pred. No. 3.75e-10;
                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
ROVAI L.E., HERSCHMAN H.R., SMITH J.B.;
SUBMITTED (APR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-APR-1993 (REL. 25, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
GRANULOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (GCP-2).
                                                                                                                                                                                                                                        Y SIMILARITY.

Y SIMILARITY.

390290D2 CRC32;
                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                   EMBL; U12709; G684922; -.
MIM; 600224; -
PROSITE; PS00471; SWALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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? 114 NE
49 9 BY
51 91 BX
114 AA; 11972 MW;
                                                                                                                                                                                                                                                                                                  Match
Local Similarity 100.0%;
                                                                                     EMBL; X78686; G471243; -. EMBL; L37036; G607031; -. EMBL; U12709; G684922; -.
                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                             PFAM; PF00048; i18; 1.
HSSP; P02775; 1NAP.
                                                                                                                                                                                                                                                                                                                                                       89 EICLDPEAPFLK 100
                                                                                                                                                                                                                                                                                                                                                                        HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 38-112.
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                                                                                                                                                                                         CYTOKINE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 38-57
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                                                                                                                                                                                                                                                                                                                                                                                                                                             GCP2_HUMAN
P80162;
                                                                                                                                                                                                                                                  DISULFID
SEQUENCE
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                                                                                                                                                                                                              POTENTIAL.
GRANULOCYTE CHEMOTACTIC PROTEIN 2.
GRANULOCYTE CHEMOTACTIC PROTEIN 2.
MISSING (N-TERMINAL PROCESSING VARIANT).
MISSING (N-TERMINAL PROCESSING VARIANT).
BY SIMILARITY.
BY SIMILARITY.
MAY: 4AC10E5C CRC32;
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OPDENAKKER G., VAN DAMME J.;
"Human and bovine granulocyte chemotactic protein-2: complete amino
acid sequence and functional characterization as chemokines.";
"FUNCTION: CHEMOTACTIC FOR NEUTROPHIL GRANULOCYTES.
"SUBCELLULAR LOCATION: SECRETED.
"STMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
PIR; B81188;
PIR; B51188;
                                                                                                                                                                                                                                                                                                                                                               Gaps
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MISSING (N-TERMINAL PROCESSING VARIANT).
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0
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                 Score 87; DB 1; Length 114;
Pred. No. 9.29e-09;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 75;
                                                                                                                                                                                                   HEPARIN-BINDING; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 74; DB 1; Le
Pred. No. 2.78e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1994 (REL. 28, CREATED)
01-FEB-1994 (REL. 28, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
GRANULOCYTE CHEMOTACTIC PROTEIN 2 (GCP-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
B747167F CRC32;
                                                                                                                    PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
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39 M
42 M
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11897 MV;
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83.38;
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38
38
49
49
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TISSUE=KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCYB6 OR GCP2
                                                                                                                                                                                                                                                                                                                                                            10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCP2_BOVIN
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                                                                                                                                                                                      HSSb;
                                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best
  g
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PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                        78 B'
94 B'
12343 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 66.7%;
Matches 8; Conservative
                                                                                                                                                                                                         C-X-C) (CHEMOKINE CXC)
                                                                                                                                                                                                                                                                                                                EMBL; M99368; G164326; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE LIX PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                            36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92 EVCLDPKAPLIK 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EICLDPEAPFLK 12
                                                                                                                                                                                                                                                                                                                                                                                                                          52
54
117 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                               SEQUENCE OF 37-66.
                                                                                                   MEDLINE; 91217086
                                                                                          STRAIN-YORKSHIRE;
                                                                                                                                                                                                                                                                                                                                                                                                      37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LIX_RAT P97885;
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
  ö
                                                                                                                                                                                                                                           mediators, including a new C-X-C chemokine.";
J. BIOL. CHEM. 270:16756-16765(1995).
-!- FUNCTION: MAY PARTICIPATE IN THE RECRUITMENT OF INFLAMMATORY CELLS
                                                                                                                                                                                                                                                                             BY INJURED OR INFECTED TISSUE.
-!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR II PRECURSOR (AMCF-II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                            SMITH J.B., HERSCHMAN H.R.; "Glucocorticoid-attenuated response genes encode intercellular
   ö
                                                                                                                                                                       EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 70; DB 1; Le
Pred. No. 2.90e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SY SIMILARITY.

SY SIMILARITY.

58C45B6B CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-00-1991 (REL. 19, CREATED)
01-00L-1993 (REL. 26, LAST SEQUENCE UPDATE)
01-00L-1993 (REL. 26, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117 AA.
                                                                                                           01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
     3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND SEQUENCE OF 37-66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
CYTOKINE LIX.
                                                                                                                                                                                                                                                                                                                                                                                                                                 MGD; MGI:1096868; SCYBS.
PROSITE: PS00471; SMALL_CYTOKINES_CXC; 1.
FAM: PF00048; 118; 1.
HSSP; P02775; INAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132 AA; 14190 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76.18;
                                                                                                                                                                                                                                                                                                                 C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              larity 75.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U27267; G950159; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
       Conservative
                                                                                         STANDARD;
                                                                                                                                            CYTOKINE LIX PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93 EVCLDPEAPVIK 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |:||||||| :|
| EICLDPEAPFLK 12
                                                                                                                                                                 MUS MUSCULUS (MOUSE).
                            52 EVCLDPEAPLIK 63
                                         Best Local Similarity
                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE; SIGNAL.
                                                                                                                                                                                                                       95348101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-LUNG;
         .,
o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JT 5
AMC2_PIG
P22952;
                                                                                           LIX_MOUSE
P50228;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
         Matches
                                                                                 RESULT
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STRAIN=SPRAGUE-DAWLEY;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKS.
SUBMITTED (FEB-1997) TO EMBL/GENBARK/DOBL DATA BANKS.
-; FONGTION: MAY PARTICIPATE IN THE RECRUITMENT OF INFLAMMATORY CELLS
BY INUTRED OR INFECTED TISSUE (BY SIMILARITY).
-; SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- INDUCTION: BY LIPOPOLYSACCHARIDE.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
MEDLINE; 93041741.
GOODMAN R.B., FOSTER D.C., MATHEWES S.L., OSBORN S.G., KUIJPER J.L.,
FORSTROM J.W., MARTIN T.R.;
"Molecular cloning of porcine alveolar macrophage-derived neutrophil
chemotactic factors I and II; identification of porcine IL-8 and
another intercrine-alpha protein.";
BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      porcine alveolar macrophages.";
J. BIOL. CHEM. 266:8455-8463(1991).
-!- FUNCTION: HAS CHEMOTACHIC ACTIVITY FOR PORCINE, AND IN A LESSER EXTENT, FOR HUMAN NEUTROPHILS.
-!- TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES.
                                                                                                                                                                                                                                                                                                                                                                                                        GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.; "Identification of two neutrophil chemotactic peptides produced by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 1.61e-03;
3; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9C31EF8E CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; B44253; B44253.
PIR; B39819; B39819.
PROSITE; PS004711; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; il8; 1.
HSSP; P02775; INAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 67;
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                                                                                                                                                                                                                                                                                                                                          ó
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 95189993.
FENG L., XIA Y., YOSHIMURA T., WILSON C.B.,
"Modulation of neutrophil influx in glomerollonephritis in the rat
with anti-macrophage inflammatory protein-2 (MIP-2) antibody.";
J. CLIN. INVEST. 95:1009-1017(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUANG S., PAULAUSKIS J.D., GODLESKI J.J., KOBZIK L.;
"Expression of macrophage inflammatory protein-2 and KC mRNA in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 94318061.
NAKAGAWA H., KOMORITA N., SHIBATA F., IKESUE A., KONISHI K., FUJIOKA M., KATO H.;
"Identification of cytokine-induced neutrophil chemoattractants
                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUKARYOTA; METAZOA; CHÓRDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-APR-1993 (REL. 25, CREATED)
01-APR-1993 (REL. 25, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2 PRECURSOR (MIP2) (CINC-3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=CD; TISSUE=LUNG;
FARONE A., FARONE M., SHI M.M., KOBZIK L., PAULAUSKIS J.D.;
SUBMITTED (MAR-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                         Length 130;
                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (APR-1992) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                      Score 66; DB 1; Loudred. No. 2.83e-03; 5; Mismatches 0
                                                                                                                                                                                                                                        BY SIMILARITY.
BY SIMILARITY.
5F6C874C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 AA.
                                                                                                                                             PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                             CYTOKINE LIX.
                                                                                                                                                                                                               POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pulmonary inflammation.";
AM. J. PATHOL. 141:981-988(1992).
                                                                                                                                                                                                          1 37 PC
38 130 CX
50 76 BY
52 93 BY
130 AA; 14263 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=FISHER 344; TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                   Match 71.7%;
Local Similarity 58.3%;
                                                                                                                               EMBL; U90448; G1899248; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 39-91 FROM N.A.
                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DIKAIN=CD-1; TISSUE=LUNG; MEDLINE; 93035653.
                                                                                                                                                          PFAM; PF00048; 118; 1.
HSSP; P10889; 1MI2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                        91 NVCLDPQAPLIK 102
                                                                                                                                                                                                                                                                                                                                                                         ::||||:||
1 EICLDPEAPFLK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 32-100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                         CYTOKINE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-FISHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=WISTAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRISCOLL K.;
                                                                                                                                                                                                                                       DISULFID
                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                             MIP2_RAT
                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                                                                                                            Matches
g
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                                                                                          ö
                                                                                                                                                                                                                                       -!- TISSUE SPECIFICITY: AT LEAST EXPRESSED IN THE LUNG AND TRACHEA.
-!- INDUCTION: IN LUNG, BY LIPOPOLYSACCHARIDE OR INFLAMMATION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
 (CINC), rat GRO/CINC-2 alpha and CINC-2 beta, produced by granulation tissue in culture: purification, complete amino acid sequences and characterization.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POWER C.A., PROUDFOOT A.E.I., MAGNENAT E., BACON K., WELLS T.N.C.; "Molecular cloning and characterisation of a neutrophil chemotactic protein from porcine platelets."; EUR. J. BIOCHEM. 221:713-719(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MACROPHAGE INFLAMMATORY PROTEIN 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 63; DB 1; Length 100;
Pred. No. 1.49e-02;
4; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1AE9A34E CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
PLATELET BASIC PROTEIN PRECURSOR (PBP).
                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; X65647; G56666; --
EMBL; S77604; G998407; --
EMBL; G4595; G1228141; --
EMBL; S48855; G2497; --
PIR; S21467; S21467; --
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
HSSP; P10889; IM12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARTIODACIYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT; 119 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND SEQUENCE OF 40-119.
                                         BIOCHEM. J. 301:545-550(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32 100 MA
36 62 BY
38 78 BY
100 AA; 10783 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST STOI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68.5%;
                                                                                                                                                                                                                           -!- SUBUNIT: HOMOTETRAMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 63.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                    SEQUENCE OF 32-59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76 EVCLNPEAPLV 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |:||:|||:|
| EICLDPEAPFL 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=PLATELET;
MEDLINE; 94229068.
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P43030;
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                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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  -i- FUNCTION: CHEMOATTRACTANT FACTOR FOR NEUTROPHILS.
-i- MASS SPECTROMETRY: MW-8597.5; METHOD-ELECTROSPRAY: RANGE-40-119.
-i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "MAGNET., SEXI N., TANNAKA A., ISHIKAWA K.-I., NOMURA N.;
"Prediction of the coding sequences of unidentified human genes. IV.
The coding sequences of 40 new genes (KIAA0121-KIAA0160) deduced by
analysis of cDNA clones from human cell line KG-1.";
DNA RES. 2:167-174(1995).
-:- SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN (POTENTIAL).
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 119;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                PLATELET BASIC PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 63; DB 1; L'
Pred. No. 1.49e-02;
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01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
HYPOTHETICAL PROTEIN KIAA0133.
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BY SIMILARITY.
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PFAM; PF00048; 118; 1.
HSSP; P02775; INAP.
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40 119 PL
54 80 BY
56 96 BY
119 AA; 12615 MW;
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                                                                               C-X-C) (CHEMOKINE CXC).
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TISSUE-BONE MARROW;
MEDLINE; 96127530.
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YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
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13-JUL-1986 (REL. 01, CREATED)

11-NOV-1991 (REL. 20, LAST SEQUENCE UPDATE)

15-DEC-1998 (REL. 37, LAST ANORTATION UPDATE)

15-DEC-1998 (REL. 37, LAST ANORTATION UPDATE)

16-DEC-1998 (REL. 37, LAST ANORTATION UPDATE)

16-DEC-1998 (REL. 30, LAST ANORTATION UPDATE)

17-DEC-1998 (REL. 30, LAST ANORTATION UPDATE)

18-DEC-1998 (REL. 30, LAST ANORTATION UPDATE)

19-DEP OR CTAP3 OR TGB1 OR THBGB1.

19-DEP OR CTAP3 OR TGB1 OR THBGB1.

19-DEP OR CTAP3 (HUMAN)

10-DEC-1998 (HUMAN)

10-DE
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BY SIMILARITY.
BY SIMILARITY.
ECCC2B4C CRC32;
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EUKARYOTA, METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG GAMMA PRECURSOR (GRO-GAMMA).
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                                                                                                                                                                                                                                             Score 63; DB 1; Lenguare-
Tred. No. 1.49e-02;
Tred. No. -hes 2; Indels
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PROSITE; PS0471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
CYTOKINE; GROWTH FACTOR.
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Pred. No. 2.57e-02;
                                                                                                                                                                            POTENTIAL.
MW; E074D413 CRC32;
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                                  POTENTIAL.
POTENTIAL.
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POTENTIAL
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81 B
10393 MW;
   906 926
93 1013
1150 1170
1310 1330
1335 1355
1462 1482
1524 AA; 170569 M
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                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 33.3%;
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046675;
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MAJUMDAR S., GONDER D., KOUTSIS B., PONCZ M.; "Characterization of the human beta-thromboglobulin gene. Comparison with the gene for platelet factor 4."; J. BIOL. CHEM. 266:5785-5789(1991).
                                                                                                                                                        MEDLINE; 89229374.
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WILdning of cDNA coding for connective tissue activating peptide III
from a human platelet-derived lambda gtll expression library.";
BLOOD 73:1498-1503(1989).
                                                                                                                                                                                                                                                                                                                                                                                                         CASTOR C.W., MILLER J.W., WALZ D.A.; "Structural and biological characteristics of connective tissue activating peptide (CTAP-III), a major human platelet-derived growth
                                                                                                                                                                                                                                                                                                               "Characterization of human platelet basic protein, a precursor form of low-affinity platelet factor 4 and beta-thromboglobulin."; BIOCHEMISTRY 25:1988-1996(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 89193761.
WALZ A., BAGGIOLINI M.;
"A novel cleavage product of beta-thromboglobulin formed in cultures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Generation of the neutrophil-activating peptide NAP-2 from platelet basic protein or connective tissue-activating peptide III through monocyte proteases.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CASTOR C.W., WALZ D.A., RAGSDALE C.G., HOSSLER P.A., SMITH E.M., BIGNALL M.C., AARON B.P., MOUNTJOY K., "Connective tissue activation. XXXIII. Biologically active cleavage products of CTAP-III from human platelets."; BIOCHEM. BIOPHYS. RES. COMMUN. 163:1071-1078(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUNGL A.J., MACHIUS M., HUBER R., SCHWER C., LAM C., ASCHAUER H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of stimulated mononuclear cells activates human neutrophils."; BIOCHEM. BIOPHYS. RES. COMMUN. 159:969-981(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 78187279.
BEGG G.S., PEPPER D.S., CHESTERMAN C.N., MORGAN F.J.;
"Complete covalent structure of human beta-thromboglobulin.";
BIOCHEMISTRY 17:1739-1744(1978).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Chemical synthesis, purification, and characterization of two inflammatory proteins, neutrophil activating peptide 1 (interleukin-8) and neutrophil activating peptide."; BIOCHEMISTRY 30:3128-3135(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLARK-LEWIS I., MOSE B., WALZ A., BAGGIOLINI M., SCOTT G.J.,
                                                                                                                                                                                                                                                                                     HARRIS M.E., HOLT A.M., LANGE E., HENSCHEN A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROC. NATL. ACAD. SCI. U.S.A. 80:765-769(1983).
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X-RAY CRYSTALLOGRAPHY OF 59-128.
                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 44-66 AND 125-128.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EXP. MED. 171:449-454(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90155110.
BAGGIOLINI M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 48-126.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SYNTHESIS OF 59-126.
                               SEQUENCE FROM N.A.
                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 59-126.
                                                 91170256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OF 57-68.
89391960.
                                                                                                                                                                                                                                                       SEQUENCE OF 35-53
                                                                                                                                                                                                                                                                                                                                                                                               83144010
                                                                                                                                                                                                                                                                      MEDLINE; 86216117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 59-67.
                                                                                                                                                                                                                                                                                                NIEWIAROWSKI S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 94307404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 91175767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AEBERSOLD R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE;
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                                                                                                                                                                                                                                                                    CHEMOATTRACTANT AND ACTIVATOR FOR NEUTROPHILS.
SUBUNIT: BETA-THROMBOGLOBULIN IS AN HOMOTETRAME.
PTM: PROTECUTIC REMOVAL OF RESIDUES 1-9 PRODUCES THE ACTIVE
PEPTIDE CONNECTIVE-TISSUE ACTIVATING PEPTIDE III (CTAP III) (LOW-
PTM: PROTECUTIC REMOVAL OF RESIDUES 1-13 PRODUCES THE ACTIVE
PEPTIDE DETA-THROMBOGLOBULIN, WHICH IS RELEASED FROM PLATELET'S
REPRINTY BELONG WITH PLATELET FACTOR 4 AND PLATELET-DERIVED GROWTH FACTOR.
SINILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                      MALKOWSKI M. G., WU J.Y., LAZAR J.B., JOHNSON P.H., EDWARDS B.F.P.;
"The crystal structure of recombinant human neutrophil-activating
peptide-2 (M6L) at 1.9-A resolution.';
J. BIOL. CHEM. 270:7077-7087(1995).
-!- FUNCTION: LA-PF4A STIMULATES DNA SYNTHESIS, MITOSIS, GLYCOLYSIS,
INTRACELLULAR CAMP ACCUMULATION, PROSTAGLANDIN E2 SECRETION, AND
ALSO STRUCTARES THE FORMATION AND SUCRATED GLYCOSAMINOGINCAN. IT
ACTIVATOR BY HUMAN SYNOVIAL CELLS. NAP-2 IS A POTENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
DEOXYRIBOSE-PHOSPHATE ALDOLASE (EC 4.1.2.4) (PHOSPHODEOXYRIBOALDOLASE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
EHN G., LINDLEY I.J.D., AUER M.; "Purification, crystallization and preliminary X-ray diffraction analysis of recombinant human neutrophil-activating peptide 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PFAM; PF00048; 118; 1. -- CYTOKINE; CONNECTIVE TISSUE; GROWTH FACTOR; CHEMOTAXIS; MITOGEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PLATELET BASIC PROTEIN (PBP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                              X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS) OF 59-128.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LA-PF4 / CTAP-III.
BETA-THROMBOGLOBULIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128 PLATELET BASIC PROTI

128 LA-PF4 / CTAP-III.

128 BETA-THROMBOGLOBULII

128 NAP-2.

89

105

A; 13894 MW; 15B7DIDF CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 62; DB 1; Le
Pred. No. 2.57e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL; 3D-STRUCTURE.
                                                            FEBS LETT. 347:300-303(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-DEC-1998 (REL. 37, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SWISS-2DPAGE; P02775; HUMAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL, M54995; G181176; -. PIR; A39546; TGHU. PIR; A24448; A24448. PIR; A37382;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1NAP; 19-DEC-95.
1TVX; 11-JAN-97.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         44
48
59
63
63
128 AA;
                                                                                                                   95221354
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15-DEC-1998
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P73618;
                                                                                                               MEDLINE;
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DISULFID
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Query Match
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NAKAGAMA H., KOMORITA N., SHIBATA F., IKESUE A., KONISHI K.,
NAKAGAMA H., KOMORITA N., SHIBATA F., IKESUE A., KONISHI K.,
FUJIOKA M., KATO H.;
"Identification of cytokine-induced neutrophil chemoattractants
"Identification of cytokine-induced neutrophil chemoattractants
(CINC), rat GRO/CINC-2 alpha and CINC-2 beta, produced by granulation
tissue in culture: purification, complete amino acid sequences and
therefore its alpha and cincin acid sequences and
                                                                                                                                                                                                                                           01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-0CT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN-2-ALPHA (MIP2-ALPHA)
                                                                                                 KANEKO T., SATO S., KOTANI H., TANAKA A., ASAMIZU E., NAKAMURA Y., MIYAJIMA N., HIROSAWA M., SUGIURA M., SASAMOTO S., KIMURA T., HOSOUCHI T., MATSUNO A., MURAKI A., NAKAZAKI N., NARUO K., OKUMURA S. SHIMMO S., TAKEUCHI C., WADA T., WATANABE A., YAMADA M., YASUDA M., TABATA S.;
                                                                                                                                                                                  "Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions."; DNA RES. 3:109-136(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.; aCytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a n member of rat GRO/CINCs, is a predominant chemokine produced by lipopolysaccharide-stimulated rat macrophages in culture."; BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUKARYOTA; METAZOA; CHÓRDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67.4%; Score 62; DB 1; Length 225; 58.3%; Pred. No. 2.57e-02; ative 2; Mismatches 3; Indels
                              SYNECHOCYSTIS SP. (STRAIN PCC 6803).
BACTERIA; CYANOBACTERIA; CHROCCCCALES; SYNECHOCYSTIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 225 AA; 23874 MW; 09714B7A CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BIOCHEM. J. 301:545-550(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; D90908; G1652744; -. LYASE; SCHIFF BASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            145 EICLDAGVQYLK 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EICLDPEAPFLK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 96183056.
         (DEOXYRIBOALDOLASE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 1-29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   characterization.
                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-WISTAR;
                           DEOC OR SLL1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MI2A_RAT
Q10746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
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-!- FUNCTION: PRODUCED BY ACTIVATED MONOCYTES AND NEUTROPHILS AND EXPRESSED AT SITES OF INFLAMMATION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=129/SV;
BOZIC C.R., KOLAKOWSKI L.F. JR., VON UEXKULL C., GARCIA-RODRIGUEZ M.,
BOZIC C.R., KOLAKOWSKI L.F. JR., SHOWFLL H.J., GERARD N.P., GERARD C.;
CONKLYN M.J., BEESLOW R., SHOWFLL H.J., GERARD BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-0CT-1989 (REL. 12, CREATED)
01-0CT-1989 (REL. 12, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
101-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
11NDUCIBLE PROTEIN KC) (SECRETORY PROTEIN N51).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OHMORI Y., FUKUMOTO S., HAMILTON T.A.;
"Two structurally distinct kappa B sequence motifs cooperatively control LPS-induced KC gene transcription in mouse macrophages."
J. IMMUNOL. 155:3593-3600(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RYSECK R.P., MACDONALD-BRAVO H., MATTEL M.-G., BRAVO R.; "Cloning and sequence of a secretory protein induced by growth factors in mouse fibroblasts."; EXP. CELL RES. 180:266-275(1989).
                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MUS MUSCULUS (MOUSE).
EUKRRYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                           Pred. No. 7.50e-02;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                     Score 60; DB 1; Length 68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96 AA.
                                                                                                                                                                                                                                                68 AA; 7670 MW; 8682C815 CRC32;
                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE
                                                                   C-X-C) (CHEMOKINE CXC).

PROSITE; PSO0471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
PSSP; P10889; 1M12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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                                                                                                                                                                                                                                                                                                                                       Local Similarity 63.6%;
                                                                                                                                                                                                                                                                                                              65.2%;
                                                                                                                                                                                                                                                                                                                                                                         7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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| EICLDPEAPFL 11
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GRO_MOUSE
                                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -1- SUBUNT: HOMOTETRAMER.
-1- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 89098900.
WOLPE S.D., SHERRY B., JUERS D., DAVATELIS G., YURT R.W., CERAMI A.; "Identification and characterization of macrophage inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 9828558.
SHOW W., JERYA L.F., WEST J., LOLIS E., SCHWEITZER B.I.;
Solution structure of murine macrophage inflammatory protein-2.";
BIOCHEMISTRY 37:8303-831(1998).
-! FUNCTION: CHEMOTACTIC FOR HUMAN POLYMORPHONUCLEAR LEUKOCYTES BUT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TEKAMP-OLSON P., GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B., FABRE M., VAN DEVENTER S., CERAMI A.; "Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues."; EXP. MED. 172:911-919(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIURGGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                      2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                     Score 60; DB 1; Length 96;
                                                                                                                                                                      CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL. SIGNAL
                                                                                                                                                                                                        GROWTH REGULATED PROTEIN.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL.1989 (REL. 11, CREATED)
01-FEB-1991 (REL. 17, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2 PRECURSOR (MIP2).
                                                                                                                                                                                                                                                                                                    Pred. No. 7.50e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein 2.";
PROC. NATL. ACAD. SCI. U.S.A. 86:612-616(1989).
                                                                                                                                                                                                                                                       36FDD348 CRC32;
                                                                                                                              SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                             PROBABLE
                          EMBL; U20634; G706843;
EMBL; U20527; G706843; JOINED.
EMBL; S79767; E220978;
PIR; A32954; A32954.
PIR; JH0081; JH0081.
                                                                                                                                                                                          1 24 PI
25 96 GI
33 59 BI
35 75 BI
96 AA; 10254 MW;
                                                                                                                                                                                                                                                                              Query Match 65.2%;
Best Local Similarity 72.7%;
Matches 8; Conservative
             EMBL; J04596; G201043; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                          MGD; MGI:108068; GRO1.
PROSITE; PS00471; SMALL
PFAM; PF00048; i18; 1.
HSSP; P09341; 1MSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MUS MUSCULUS (MOUSE).
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| EICLDPEAPFL 11
                                                                                                                                                                                                                                                                                                                                             73 EACLDPEAPLV 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 28-59.
MEDLINE; 89098980.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 90354792.
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P10889;
                                                                                                                                                                                                                  DISULFID
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                                    MGD; MGI:96991; MIP2.
PROSITE: PSO0471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN 2.
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                                                                                                                                                                      Query Match
Best Local Similarity 70.0%; Pred. No. 7.50e-02;
Matches 7; Conservative 3; Mismatches 0; Indels
                                                                                                        28 100 MACROPHAGE INFLAM
36 62
38 78
100 AA; 10621 MW; 333AC6A4 CRC32;
                                                                                                                                                                                                                                                                                          Search completed: Fri Feb 4 17:16:12 2000
EMBL; X53798; G53129; -.
                          PDB; 1MI2; 29-APR-98.
               JH0200
                                                                                                                                                                                                                           77 VCLDPEAPLV 86
                                                                                                                                                                                                                                           :[|||||::
2 ICLDPEAPFL 11
                                                                                                                                                                                                                                                                                                         Job time : 23 secs.
               PIR; JH0200;
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:15:11 2000; MasPar time 3.59 Seconds 133.808 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-41 (1-12) from US09150813.pep 92 1 EICLDPEAPFLK 12 Description: Perfect Score: Sequence: Title:

Scoring table:

PAM 150 Gap 15

122810 seqs, 40068593 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

Mean 24.908; Variance 32.652; scale 0.763 pir60 1:pirl 2:pir2 3:pir3 4:pir4

Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	1.45e-08	2.456-07	2.88e-04	2.30e-03	1.05e-02	7.586-02	7.58e-02	7.58e-02	7.58e-02	1.23e-UI	1.23e-01	٠	3.19e-01	3.19e-01	٠	Τ, '	•	8.14e-01	1.29e+00	1.29e+00	1.296+00	1.29e+00	1.296+00	
	Description	neutrophil-activating	granulocyte chemotact	granulocyte chemotact	C-X-C chemokine LIX -				macrophage inflammato	platelet basic protei	beta-thromboglobulin	deoxyribose-phosphate	hypothetical protein	gro-alpha precursor	macrophage inflammato	<u>-</u>	gene KC protein - rat	neutrophil chemo-attr	ADP-L-glycero-D-manno	RSV-induced protein -	transformation-induce	nonstructural protein	hypothetical protein	ADP-L-glycero-D-manno	
	ID	A55010	A54188	B54188	A57325	B44253	151886	S21467	155614	S42881	TGHU	S77105	B71466	A32954	JH0200	S46198	164831	JN0572	JC4066	I50417	A26736	UYPVF3	S75498	JU0299	
	DB	. 2	~	7	7	~	7	~	~	7	Н	7	7	7	7	7	7	7	C	~	~	Н	7	7	
	Query Match Length	114	75	75	132	117	53	100	100	119	128	225	427	96	100	100	53	96	314	103	103	167	225	310	
æ	Query Match	100.0	94.6	80.4	76.1	72.8	ထ	68.5	68.5	68.5	67.4	67.4	67.4	65.2	65.2	65.2	63.0	63.0	63.0	62.0	62.0	62.0			•
	Score	92	8 2	7.4	7.0	67	63	63	63	63	62	20	200	9	9	9	α α α	0 10	o cr	2,7	7.5	57	57	57	;
	Result No.	-	40	n (*) <	* 10	ı vc	,	. α	σ	, 5		12	7 -	7	, tr	9 -	17	ď	9 0	61	3.5	22	2.6	1

S51434 hypothetical protein S37457 self-incompatability A3964 potcosystem II oxygen B41182 photosystem II oxygen B41182 photosystem II oxygen B41182 photosystem II oxygen B28414 deoxyribose-phosphate S51746 hypothetical protein B5550 conserved hypothetical protein hypothetical protein hypothetical protein hypothetical protein hypothetical protein hypothetical 20.8 kD 56704 photosystem II oxygen A35763 collagen alpha 1(II) collagen alpha 1(II) mouse photosystem II oxygen A56812 https://doi.org/10.0001/10.0	
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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75
40044444444444444444444444444444444444	45

ALIGNMENTS

A55010 #type complete neutrophil-activating peptide ENA-78 precursor - human neutrophil-activating peptide 78 (ENA-78) epithelial-derived neutrophil-activating peptide 78 (ENA-78) #formal_name Homo sapiens #common_name man 11-Nov-1994 #sequence_revision 03-0ct-1995 #text_change 13-Nov-1999 #sequence_revision 03-0ct-1995 #text_change	ESSIONS JC443; ASSULU; 137537, GROSS, C.; Walz, A.; ERENCE JC2433 #authors Corbett, M.S.; Schmitt, I.; Riess, C.; Walz, A.; #authors Blochem. Biophys. Res. Commun. (1994) 205:612-617 #title Corpetterization of the gene for human neutrophil-activating peptide 78 (ENA-78). #cross.references MUID:95091791 #accession JC2433 ##assidued.type DNA #label COR #residences		ERENCE 137357 #authors Power, C.A.; Furness, R.B.; Brawand, C.; Wells, T.N. #authors Gene (1994) 151:333-334 #ittle Cloning of a full-length cDNA encoding the neutrophil-activating peptide ENA-78 from human platelets. #cross.references MuID:95129887 #accession 137357 # translated from GB/EMBL/DDBJ ##molecule_type mRNA ##molecule_type mRNA	##residues ##residues ##cross-references EMBL:X78686; NID:9471242; PID:9471243 ##cross-references EMBL:X78686; NID:9471242; PID:9471243 ##cross-references EMBL:X78686; NID:9471242; PID:9471243 ##cross-references EMBL:X78686; NID:9471242; PID:9471243; M.: Kunkel, ##cross-references EMBL:X78686; NID:92078844 ##accession JH0558
1 NAMES	ACCESSIONS JC2433; JC2433; JC2433; JC2433 JC	REFERENCE A55010 #authors Chang, M #journal J. Biol. #tile Cloning; haccession A5010 #molecule_type DNA ##molecule_type DNA ##residues	REFERENCE 137357 #authors Power, C., #journal Gene (199) #title Cloning o neutrop #cross-references MUD: #accession 137357 #status tran ##molecule_type mRNA	##residues ##cross-ref ##cross-ref #authors #journal #title #cross-referen

1 EICLDPEAPFLK 12

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A.; Opdenakker, G.; Van Damme, J. Blochemistry (1993) 32:10170-10177 Human and bovine granulocyte chemotactic protein-2: complete amino acid sequence and functional characterization as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proost, P.; Wuyts, A.; Conings, R.; Lenaerts, J.P.; Billiau,
                                                                                                                                                                                                                                         #domain signal sequence #status predicted #label SIG\
#product neutrophil-activating peptide ENA-78 #status
experimental #label MAT
#length 114 #molecular-weight 11972 #checksum 9263
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J. Immunol. (1993) 150:1000-1010
Identification of a novel granulocyte chemotactic protein
(GCP-2) from human tumor cells. In vitro and in vivo
comparison with natural forms of GRO, IP-10, and IL-8.
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##note sequence extracted from NCBI backbone (NCBIP:137966)
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##note sequence extracted from NCBI backbone (NCBIP:123121)
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                                 ##experimental_source pulmonary type II epithelial cell line A549 cession PS0347
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#length 75 #molecular-weight 8074 #checksum 86
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94.6%; Score 87; DB 2; Length 75;
Best Local Similarity 83.3%; Pred. No. 2.45e-07;
Matches 10; Conservative 2; Mismatches 0; Indels
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granulocyte chemotactic protein - human
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Pred. No. 1.45e-08;
                                                                                                                                                                                      #superfamily beta-thromboglobulin
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                                                               ##molecule_type protein
##residues 37-70;93-114 ##label WAL2
                     43-114 ##label WAL1
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##rosidues 1-75 ##label pro
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                                                                                                                                                                    81/3; 109/2
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Best Local Similarity 100.0%;
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A54188; A46519
                                                                                                                                                                                                                                                                                                                                                                            12; Conservative
                                                                                                                              ENA78; NAP
##molecule_type mRNA
                                                                                                                                                                                                                                                                                                                                                                                                           89 EICLDPEAPFLK 100
                                                                                                                                                                                                         cytokine
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#introns 37/1; 81
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KEYWORDS
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A.; Opdenakker, G.; Van Damme, J.
Blochemistry (1993) 32:10170-10177
Human and bovine granulocyte chemotactic protein-2: complete
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J. Biol. Chem. (1995) 270:16756-16765
Glucocorticoid-attenuated response genes encode intercellular
mediators, including a new C-X-C chemokine.
                                                                                                                                                      Proost, P.; Wuyts, A.; Conings, R.; Lenaerts, J.P.; Billiau,
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intercrine-alpha protein - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
                                                                                                                                                                                                                                                                                                                                                                                  *Sequence extracted from NCBI backbone (NCBIP:137967)

*superfamily beta-thromboglobulin

*length 75 *molecular-weight 7931 #checksum 8842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              preliminary; not compared with conceptual translation
                                                                                                                                                                                                                                amino acid sequence and functional characterization as
                                    granulocyte chemotactic protein, GCP-2 - bovine
#formal_name Bos primigenius taurus #common_name cattle
13-Sep-1994 #sequence_revision 18-Nov-1994 #text_change
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#formal_name Mus musculus #common_name house mouse
08-Dec-1995 #sequence_revision 08-Dec-1995 #text_change
08-Sep-1997
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#length 132 #molecular-weight 14190 #checksum 2181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 2.30e-03;
2; Mismatches 1; Indels
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##cross_references GB:U27267; NID:9950158; PID:9950159
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                        #type complete
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C-X-C chemokine LIX - mous
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Best Local Similarity 75.0%;
Matches 9; Conservative
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1 EICLDPEAPFLK 12
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                                                       Goodman, R.B.; Foster, D.C.; Mathewes, S.L.; Osborn, S.G.; Kuijper, J.L.; Forstrom, J.W.; Martin, T.R. Biochemistry (1992) 31:10483-10490 Molecular Cloning of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porcine IL-8 and another intercrine-alpha protein.
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Am. J. Pathol. (1992) 141:981-988
Expression of macrophage inflammatory protein-2 and KC mRNA
                                                                                                                                                                                                                                                                                                  ##experimental_source alveolar macrophage
##note sequence extracted from NCBI backbone (NCBIN:117417,
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20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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macrophage inflammatory protein-2 - rat (fragment)
macrophage sp. #common_name rat
#formal_name Rattus sp. #common_name rat
12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change
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SUMMARY #length 117 #molecular-weight 12343 #checksum 9615
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Pred. No. 7.58e-02;
4; Mismatches 0; Indels
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Pred. No. 1.05e-02;
3; Mismatches 1; Indels
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##residues 1-117 ##label GOO
##cross-references GB:M99368; NID:9164325; PID:9164326
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macrophage inflammatory protein 2 - rat
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CLASSIFICATION #superfamily beta-thromboglobulin
sUMMARX #length 53 #checksum 9622
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Llarity 63.6%;
Conservative
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Best Local Similarity 66.7%;
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| EICLDPEAPFLK 12
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Feng, L.; Xia, Y.; Yoshimura, T.; Wilson, C.B.
J. Clin. Invest. (1995) 95:1009-1017
Modulation of neutrophil influx in glomerulonephritis in the
rat with anti-macrophage inflammatory protein-2 (MIP-2)
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#formal_name Sus scrofa domestica #common_name domestic pig
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
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                                                                  Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda,
                                                                                                                                                                                                                                                                                                                                    ##experimental_source kidney, NRK-49F fibroblasts
##note sequence extracted from NCBI backbone (NCBIP:129129)
FPICATION #superfamily beta-thromboglobulin

XY #length 100 #molecular-weight 10783 #checksum 709
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macrophage inflammatory protein-2 - rat
formal_name Rattus sp. #common_name rat
26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change
16-Feb-1997
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Ferr. J. Biochem. (1994) and characterisation of a neutrophil chemotactic protein from porcine platelets.
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                                                                                    #journal Biochem. Pharmacol. (1993) 45:1425-1430
#title Production of an interleukin-8-like chemokine by cytokine-stimulated rat NRK-49F fibroblasts and its suppression by anti-inflammatory steroids.
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                    ##cross-references EMBL:X65647; NID:956665; PID:956666
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##residues 32-45 ##label NAK
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HOLL, J.C.; Harris, M.E.; Holt, A.M.; Lange, E.; Henschen, A.; Niewiarowski, S.
Biochemistry (1986, 25:1988-1996
Characterization of human platelet basic protein, a precursor form of low-affinity platelet factor 4 and beta-thromboglobulin.
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beta-thromboglobulin precursor - human
connective-tissue activating peptide III; CTAP-III;
histamine-releasing factor; neutrophil-activating peptide
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#title Generation of the neutrophil-activating peptide NAP-2 from platelet basic protein or connective tissue-activating peptide III through monocyte proteases.
#cross-references MUID:90155110
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Majumdar, S.; Gonder, D.; Koutsis, B.; Poncz, M.
#journal J. Biol. Chem. (1991) 266:5785-5789
#title Characterization of the human beta-thromboglobulin gene.
Comparison with the gene for platelet factor 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                        2; platelet basic protein
#formal_name Homo sapiens #common_name man
30-Apr-1979 #sequence_revision 31-Dec-1992 #text_change
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Cloning of cDNA coding for connective tissue activating
peptide III from a human platelet-derived lambdagtII
expression library.
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A61240; B61240; A03240; A30159; A33516; S46247
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CLASSIFICATION #superfamily beta-thromboglobulin
#length 119 #molecular-weight 12615 #checksum 9198
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                                                                                                                                                                                  Length 119;
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                                                                                                                                                                    Ouery Match 68.5%; Score 63; DB 2; Le
Best Local Similarity 81.8%; Pred. No. 7.58e-02;
Matches 9; Conservative 1; Mismatches 1;
                                                                            1-119 ##label POW
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#cross-references MUID:94229068
                                ##molecule_type mRNA
##residues
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There ampeters to be a second beta-thromboglobulin-like human gene.

There ampeters to be a second beta-thromboglobulin-like human gene.

Connective-tissue activating peptides (CTAP) are a group of proteins capable of activating connective tissue cells. CTAP-I,

'II, 'III and 'P2, and 'PMN are of lymphoid, tumor cell, human platelet, and polymorphonuchear leukocyte origin, respectively.

TAP-III, a monomer isolated from platelets, stimulates DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and secretion of plasminogen activator by human synovial cells.

Protecolytic removal of the first four residues of CTAP-III produces the active peptide beta-thromboglobulin, which is released from platelets along with platelet factor 4 and platelet-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacza, M.L.; Reddigari, S.R.; Kornfeld, D.; Ramani, N.;
Smith, E.M.; Hossler, P.A.; Fischer, T.; Castor, C.W.;
Grevic, P.C.; Raplan, A.P.
J. Clin. Invest. (1990) 85:1516-1521
Relationship of one form of human histamine-releasing factor
to connective tissue activating peptide-III.
                                                                                                                                                                                                                                                                                                                                                                                  #authors Begg, G.S.; Pepper, D.S.; Chesterman, C.N.; Morgan, F.J.
#journal Blochemistry (1978) 17:1739-1744
#title Complete covalent structure of human beta-thromboglobulin.
#cross-references MUID:78187279
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Aschauer, H.; Ehn, G.; Lindley, I.J.D.; Auer, M.
                                                  Castor, C.W.; Miller, J.W.; Walz, D.A.
Proc. Natl. Acad. Sci. U.S.A. (1983) 80:765-769
Structural and biological characteristics of connective
tissue activating peptide (CTAP-III), a major human
platelet-derived growth factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Kaplan, A.P.; Baeza, M.; Reddigari, S.; Kuna, P. #journal Int. Arch. Allergy Appl. Immunol. (1991) 94:148-153 #tile Histamine-releasing factors. #cross-references MUID:92040226 #accession A61240
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#title Purification, crystallization and preliminary X-ray diffraction analysis of recombinant human neutrophil-activating peptide 2 (rhNaP-2).
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##molecule_type protein
##residues 44-62,'X',64-79 ##label BAE
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##residues 59-62,'X',64-79 ##label KA2
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##residues 44-66;125-128 ##label CAS
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54-67 ##label WAL
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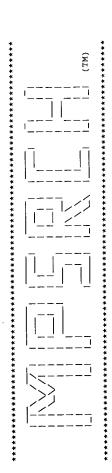
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DNA Res. (1996) 31.09-136
Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the nucleotide sequence was submitted to the EMBL Data
Library, June 1996
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deoxyribose-phosphate aldolase (EC 4.1.2.4) - Synechocystis
sp. (strain PCC 6803)
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#domain propeptide #status predicted #label PRO\
#product connective-tissue activating peptide III
#status experimental #label CTAP\
#product beta-thromboglobulin #status experimental
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                                                                                                    *product neutrophil-activating peptide 2 *status
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Pred. No. 1.23e-01;
2; Mismatches 1; Indels
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#disulfide_bonds #status experimental
#length 128 #molecular-weight 13894 #chee
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Matches 7; Conservative
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#authors Ryseck, R.P.; MacDonald-Bravo, H.; Mattei, M.G.; Bravo, R. #journal Exp. Cell Res. (1989) 180:266-275
#title Cloning and sequence of a secretory protein induced by growth factors in mouse fibroblasts.
#cross-references MUID:89078502
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J. Biol. Chem. (1989) 264:4133-4137
The platelet-derived growth factor-inducible KC gene encodes a secretory protein related to platelet alpha-granule
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                                                                                                                                                                                                                                                        ##resides 1-427 ##label ARN ##resides 1-427 ##label ARN ##resides 6B:AE001355; GB:AE001273; NID:q3329292; PID:g3329295 ##experimental_source serotype D, strain UW-3/Cx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #domain signal sequence #status predicted #label SIG\
#product gro-alpha #status predicted #label MAT
#length 96 #molecular-weight 10254 #checksum 5052
#authors Stephens, R.S.; Kalman, S.; Lammel, C.J.; Fan, J.; Marathe, R.; Aravind, L.; Mitchell, W.P.; Olinger, L.; Tatusov, R.L.; Zhao, Q.; Koonin, E.V.; Davis, R.W. Science (1998) 282.754-759 #title Genome sequence of the humans: Chlamydia trachomatis.
#cross-references MUID:99000809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #192954 #type complete
gro-alpha precursor - mouse
gro-protein; growth regulated protein; melanoma
growth-stimulating activity factor; melanoma mitogenic
protein; secretory protein N31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This protein is basic and lacks threonine, phenylalanine, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #formal_name Mus musculus #common_name house mouse
20-oct-1989 #sequence_revision 20-Oct-1989 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                            #length 427 #molecular-weight 48583 #checksum 4805
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 62; DB 2; Length 427;
Pred. No. 1.23e-01;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 96;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 60; DB 2; Le
Pred. No. 3.19e-01;
2; Mismatches 1;
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##residues 1-96 ##label RYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 extracellular protein
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Best Local Similarity 72.7%;
Matches 8; Conservative
                                                                                                                                                                                                                          preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              А32954; JH0081
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 67.4%;
Best Local Similarity 70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7; Conservative
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CLASSIFICATION #8
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Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.
J. Exp. Med. (1990) 172:911-919
#Litle Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues.
#Cross-references MUID:90354792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #domain signal sequence #status predicted #label SIGN #product macrophage inflammatory protein 2 #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ##INGLECLICE_LYPE HANN
##Insidues 1-100 ##label NAK
##Cross-references EMBL:D21095; NID:9517143; PID:d1005186; PID:9517144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda,
                                                                                                                              JH0200 #type complete
macrophage inflammatory protein 2 precursor - mouse
#formal_name Mus musculus #common_name house mouse
30.Sep-1991 #sequence_revision 30.Sep-1991 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wolpe, S.D.; Sherry, B.; Juers, D.; Davatelis, G.; Yurt,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chemoattractants (CINC), rat GRO/CINC-2-alpha and CINC-2-beta, produced by granulation tissue in culture: purification, complete amino acid sequences and characterization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
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cytokine-induced neutrophil chemoattractant 2 - rat
#formal_name Rattus norvegicus #common_name Norway rat
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               experimental #label MAT #length 100 #molecular-weight 10621 #checksum 8720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:612-616
#title Identification and characterization of macrophage
#cross-references MuID:89098980
#accession A32190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 60; DB 2; Length 100;
Pred. No. 3.19e-01;
3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mr.; Fujioka, M.; Kato, H.
Biochem. J. (1994) 301:545-550
Identification of cytokine-induced neutrophil
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ##residues 1-100 ##label TEK
##cross-references GB:X53798; NID:953128; PID:953129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-59 ##label WOL
#superfamily beta-thromboglobulin
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Local Similarity 70.0%;
hes 7; Conservative
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S46198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ##molecule_type protein
                                                                                                                                                                                                                                                                                                                                                                                                                              ##molecule_type mRNA
73 EACLDPEAPLV 83
                                         1 EICLDPEAPFL 11
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##residues 1-10
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2 ICLDPEAPFL 11
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                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                        ORGANISM
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##residues 33-56 ##label NA2
##experimental_source kidney, NRK 49F fibroblasts
##cote extracted from NCBI backbone (NCBIP:129130)
Sequence extracted from NCBI backbone (NCBIP:129130)
SUMMARX #superfamily beta-thromboglobulin
#length 100 #molecular-weight 10989 #checksum 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
T.; Komorita, N.; Watanabe, K.; Miyai, H.
Biochem. Pharmacol. (1993) 45:1425-1430
Production of an interleukin-8-like chemokine by
cytokine-stimulated rat NRK-49F fibrobiasts and its
                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2; Length 100;
                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 65.2%; Score 60; DB 2; Length 100; Best Local Similarity 63.6%; Pred. No. 3.19e-01; Matches 7; Conservative 3; Mismatches 1; Indels
                                                                                                                suppression by anti-inflammatory steroids.
#cross-references MUID:93228656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search completed: Fri Feb 4 17:15:32 2000 Job time: 21 secs.
                                                                                                                                                                                            preliminary
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| EICLDPEAPFL 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77 EVCLNPQAPRL 87
                                                                                                                                                                  C48988
                                                                                                                                                                                         ##status
                            #journal
                                                       #title
```



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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:14:32 2000; MasPar time 3.48 Seconds 73.270 Million cell updates/sec Run on:

Tabular output not generated.

(1-12) from US09150813.pep >US-09-150-813-41 Description:

1 EICLDPEAPFLK 12 Perfect Score: Sednence:

Scoring table:

170751 seqs, 21266608 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

a-geneseq35 Database:

|:partil 2:part2 3:part3 4:part4 5:part5 6:part6 7:part18 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 15:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 33:part32 33:part33 34:part34 33:part35 36:part36 37:part37 38:part38 39:part39

Mean 18.372; Variance 54.493; scale 0.337 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	2.30e-03	2.30e-03	9.37e-03	9.37e-03	9.37e-03	3.35e-01	2.17e+00	4.77e+00	8.00e+00	8.00e+00	8.00e+00	8.00e+00	8.00e+00	8.00e+00	8.00e+00	8.00e+00
	Description	ENA-78.	Inflammatory peptide	Human GCP-2.	Human chemokine alpha	Human granulocyte che	Cattle GCP-2.	Mouse CKDLR201.1 chem	Human macrophage deri	Heparanase C-terminal	Neutrophil activating	Synthetic NAP-2.	NAP-2.	Neutrophil-activating	Synthetic NAP-2V.	Beta-thromboglobulin	Sequence encoded by s
	QI	R34198	R70796	R55843	W36449	W46286	R55844	W69596	W20061	R70805	R70789	R86012	R36775	W26467	R86011	R70788	P50526
	DB	7	13	10	27	31	10	34	23	13	13	16	7	25	16	13	3
	Query Match Length DB	72	7.8	75	113	114	75	160	69	32	69	70	7.0	75	75	81	82
æ	Query	100.0	100.0	94.6	94.6	94.6	80.4	72.8	9.69	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
	Score	92	92	87	87	87	7.4	67	64	62	62	62	62	62	62	62	62
	Result No.		8	e	4	r.	V.	7	- α	0	10	11	12	13	14	15	16

8.00e+00 8.00e+00 8.00e+00	8.00e+00 8.00e+00	8.00e+00		٠	00:	34	.34	.34	. 34	.34	. 34	1.34e+01	.34	.34	.34	۲.	ന	. 55	.86	8.	. 68	.72	. 72	6.05e+01	. 74
CTAP-III analogues. CTAP-III heparanase. Connective tissue act	βa	derived	of plate	erived	a.		1 chem	re KC p	Murine chemokine KC.	Mouse KC chemokine.	Murine chemokine KC.	Murine macrophage inf	m	cophage	Macrophage derived in	rownii f	uber	Cytokine and neutroph	cero-D-mann	S. cerevisiae L9470.2	0011	glyca		s sativ	Amino acid sequence o
R22991 R70786 R05550	078	R13521	R05767	R13519	R07984	R90929	R90930	W81497	W17669	R66697	W18023	R20528	R90928	R20588	R05790	R71580	R71579	R14077	R32195	438	48	2	029	R71583	88
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17	20	22	23	24	25	26	27	28	29	30	31	32	33	46	3.0	9 (9	3.7	38	3.6	40	41	42	43	44	45

ALIGNMENTS

pisclosure; Fig 5; 28pp; English.

This sequence represents polypeptide ENA-78 which is derived from
This sequence represents polypeptide ENA-78 which is derived from
This sequence represents polypeptide ENA-78 which is derived from
SC epithelial cells and has the ability to activate neutrophils. ENAThe was isolated from cultured stimulated A549 human pulmonary
The was isolated from cultured stimulated A549 human pulmonary
The DNA encoding this factor was obtained by PCR
The ENA-78 can amplification of CDNA obtained using RNA from A549 cells. ENA-78 can
be used to treat neutrophil deficeincy; i. it can be used to
The inprovement in yeast, fungal or viral infections. It can be used in
The improvement in yeast, fungal or viral infections. It can be used in
The inflammatory illnesses such as hyperproliferative skin diseases, such
as psoriasis, arthritic conditions and asthma, or in conditions of
as psoriasis, arthritic conditions and asthma, or in conditions of
as poriasis, arthritic remaining and asthma, or in conditions of
the ENA-78 may be used in the treatment of hematopoietic deficits
arising from chemotherapy or radiation therapy, for enahncing the
treatment and the treatment of bacterial infection.
Sequence 72 AA; ENA-78; epithelial cell; neutrophil; A549; human; pulmonary; burn; amplify; defieciency; activity; yeast; fungal; viral; infection; inflammatory illness; hyperpoliferative skin disease; psoriasis; arthritis; asthma; hematopoietic deficit; chemcherapy; radiation; bone marrow; transplant; wound healing; treatment; infection; PCR. New polypeptide ENA-78 neutrophil-activating factor - for treating neutrophil deficiency e.g. in bacterial, mycoplasma, yeast, fungal and viral infections, inflammatory conditions e.g. R34198 standard; Protein; 72 AA. 29-JUL-1993 (first entry) 21-APR-1993. 15-OCT-1992; 309407. 16-OCT-1991; US-778413. (WALZ/) WALZ A. WPI; 93-127862/16. N-PSDB; Q38841 sapiens. EP-538030-A. R34198; Walz A; ENA-78

Sat Feb

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0
                                        Gaps
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WPI: 94-200200/24.

WPI: 94-200200/24.

Pure mammalian granulocyte chemotactic protein-2 - which stimulates granulocytes to secrete protease, used to develop prods. for treating inflammatory conditions
Disclosure; Page 29; 54pp; English.

Human GCP-2 was isolated from human MG-63 osteosarcoma (ATCC CRL 1427) cells, and cattle GCP-2 (R55844) from MDBK (ATCC CRL 6071) GCP-2 were also isolated and sequenced (R55845, 77, R55849).

Conserved region within mammalian GCP-2 is shown in sequence R55848.

Expression of DNA encoding GCP-2 in a host cell will provide
                                                                                                                                                                                      29-AUG-1995 (first entry)
Inflammatory peptide ENA-78.
Inflammatory Peptide; ENA-78; heparanase; heparin; heparan sulfate;
arthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                               potentially useful for treating arthritis, restenosis, cancer. Claim 12; Page 43; 60pp; English.
Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in RVOT86-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced Sequence 78 AA;
                                                                                                                                                                                                                                                                                                                                                                                                               Screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation,
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                                    0; Indels
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Pred. No. 2.30e-03;
0; Mismatches 0; Indels
        Length 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCP-2; granulocyte chemotactic protein-2; protease; antiinflammatory; osteosarcoma; MG-63.
   Score 92; DB 7; Le
Pred. No. 2.30e-03;
                                   0; Mismatches
                                                                                                                                           .T 2
R70796 standard; Protein; 78 AA.
R70796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      II 3
R55843 standard; protein; 75 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-NOV-1993; E03330.
27-NOV-1992; US-982539.
(UYLE-) UNIV LEUVEN REGA INST.
                                                                                                                                                                                                                                                                                                  26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
(UPJO ) UPJOHN CO.
HOOGWERT AJ, Ledbetter SR;
WPI: 95-082239/11.
Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
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Best Local Similarity 100.0%;
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                                                              47 eicldpeapflk 58
                                                                                            1 EICLDPEAPFLK 12
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                                                                                                                                                                                                                                                          Homo sapiens.
WO9504158-A.
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                                                                                                                                                                                                                                                                                         09-FEB-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polynucleotide(s) encoding human chemokine alpha-3 - used to treat tumours, chronic infections, auto:immune diseases, parasitic infections, psoriasis, asthma etc.
Claim 13; Fig 1; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is human chemokine alpha-3 (CK alpha-3), which can be used to treat tumours, chronic infections, leukaemia, T-cell mediated autoimmune diseases, parasitic infections,
                                                                                                                                                                                                                                                                   Human chemokine alpha-3. (x alpha-3; treatment; tumour; chemokine alpha-3; Cx alpha-3; treatment; tumour; chection; leukaemia; T-cell mediated autoimmune disease; parasitic infection; psoriasis; asthma; allergy; haematopolesis; growth factor; angiogenesis; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human granulocyte chemotáctic protein 2 variant. NGCP; leukaemia; chemokine; granulocyte chemotactic protein 2 variant; NGCP; leukaemia; chemokine; alpha-intercrine; chemo-attraction; immune deficiency;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human granulocyte chemotactic protein 2 - useful for diagnosis and treatment of e.g. leukaemia claim 1; Fig IA-B; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     psoriasis, asthma and allergy. It can also be used to regulate haematopoiesis, stimulate growth factor activity, inhibit angiogenesis and promote wound healing.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94.6%; Score 87; DB 27; Length 113; 83.3%; Pred. No. 9.37e-03; Ative 2; Mismatches 0; Indels
                                                      Score 87; DB 10; Length 75; Pred. No. 9.37e-03;
                                                                                       0; Indels
recombinant protein of use as an antiinflammatory. Sequence 75 AA;
                                                                                     2; Mismatches
                                                                                                                                                                                                                  W36449 standard; Protein; 113 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        (HUMA-) HUMAN GENOME SCI INC.
                                               Query Match
Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                                                                 08-APR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 83.3%;
les 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer; immune response.
                                                                                                                                                                                                                                                                                                                                                                                   25-SEP-1997.
18-MAR-1996; U03686.
18-MAR-1996; WO-U03686.
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12-SEP-1996; US-713288.
                                                                                                                   52 qvcldpeapflk 63
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                                                                                                                                                 1 EICLDPEAPFLK 12
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WPI; 97-480232/44.
N-PSDB; T91990.
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WO9735027-A1.
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W09811227-A1.
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Vicari A, Zlotnik A;
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Disclosure; page 29; 54pp; English.

Human GCP-2 (R5643) was isolated from human MG-63 osteosarcoma (ATCC CRL 1427) cells, and cattle GCP-2 from MDBK (ATCC CRL 6071)

CATC CRL 1427) cells, and cattle GCP-2 from MDBK (ATCC CRL 6071)

CATC CRL 1427) cells, and cattle GCP-2 from MDBK (R56845-47, R55849). A conserved region within mammalian GCP-2 is shown in sequence R55848. Expression of DNA encoding GCP-2 in a host cell will provide recombinant protein of use as an antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
  family of chemokines, has similarity to other alpha-intercrines involved in the chemo-attraction and activation of leukocytes. The nucleic acid sequence encoding NGCP and the protein can be used in the diagnosis and treatment of diseases such as leukaemia and other cancer, immune deficiencies or excessive immune responses. Sequence 114 AA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         abnormal cell proliferation; regeneration; degeneration; atrophy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse CKDLR201.1 chemokine protein.
Mouse; CKDLR201.1; chemokine; G-protein coupled receptor; GPCR;
7 transmembrane receptor; inflammation; asthma; antiviral;
                                                                                                                                                                                                             ö
                                                                                                                                                               Score 87; DB 31; Length 114;
Pred. No. 9.37e-03;
2; Mismatches 0; Indels
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Pred. No. 3.35e-01;
"...ma+rhes 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     granulocyte chemotactic protein-2; protease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W69596 standard; Protein; 160 AA.
                                                                                                                                                                                                                                                                                                                                                                                 T 6
R55844 standard; protein; 75 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-NOV-1993; E03330.
27-NOV-1992; US-982539.
(UYLE-) UNIV LEUVEN REGA INST.
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                                                                                                                                                                    Query Match
Best Local Similarity 83.3%;
Matches 10; Conservative
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WPI; 94-200200/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antiinflammatory; MDBK.
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                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cattle GCP-2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-JUN-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                       R55844;
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The present sequence represents mouse CKDLR201.1 chemokine protein which comprises a plurality of epitopes. Host cells containing vectors which comprises a plurality of epitopes. Host cells containing vectors comprising a nucleotide sequence encoding the protein are used to containing a nucleotide sequence encoding the protein are used to produce recombinant protein. Treatment of a cell, particularly neuron, car receptor responsive to CKDLR201.1 chemokine protein, with an or a receptor responsive to CKDLR201.1 chemokine protein, with an cell appoints its used to control physiological development, e.g. alteration of calcium ion influx, a chemoattractant response, morphology, alteration of calcium ion influx, a chemoattractant response, morphology, controvers, e.g. for detecting and isolating related sequences and for expressing antigenic peptides. Antibodies (Ab) directed against the protein and GPCRs are used to detect or purify the proteins; controvers, e.g. for developmental abnormalities); in screening for calcuminations or radioisotope) for Killing specific cells, and compounds to a toxin or radioisotope) for Killing specific cells, and compounds which bind them can be used to treat inflammation, e.g. asthma: as anti-idiotype antibodies. CKDLR201.1 protein and GPCRs and compounds which bind them can be used to treat inflammation, e.g. asthma: as antiviral agents, and to treat abnormal cell proliferation, regeneration, confidence 160 AA; soquence 160 AA;
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                                                                      Pure or recombinant chemokine CKDLR201.1 - useful, e.g. for treating inflammation and as_antiviral agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
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Human macrophage derived chemokine analogue.
MDC, macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease;
rheumatoid arthritis; chemotaxis; fibroblast proliferation;
wound healing; anglogenesis; inflammation.
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WPI; 97-052324/05.
WROCOPHAGE derived chemokine (MDC) and analogues - used in the Macrophage derived chemokine (MDC) and antibodies used to treat treatment of inflammatory diseases, MDC antibodies used to treat Crohn's disease, rheumatodia arthritis, etc.
Claim 25; Page 84; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 67; DB 34; Length 100,
Pred, No. 2.17e+00;
......hes 1; Indels
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Best Local Similarity 72.7%;
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07-UNN-1996; U10114.
07-UNN-1995; US-479620.
16-NOV-1995; US-558658.
(ICOS-) ICOS CORP.
Godiska R., Gray PW;
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WPI; 98-414108/35.
N-PSDB; V40371.
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Purified heparanases, prepared under reducing conditions and activated with transjutaminase, are given in R70786-804. In peptide synthesis, a C-terminal peptide (R70805, encoded by cDNA sequence 085374) based on sequences for CTAP-III, platelet basic protein, beta-thromboglobulin and NAP-2, and an N-terminal peptide (R70809) based on CTAP-III and platelet basic protein were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inhibition of heparin or heparan sulphate degradation, by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 5; page 36; 60pp; English. Purified heparanses, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus
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Neutrophil activating peptide-2; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
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                                                                                                                                                                                    99-AUG-1995 (first entry)
Heparanase C-terminal peptide.
Heparanase; heparin; heparan sulfate; arthritis; restenosis;
   Score 64; DB 23; Length 69;
Pred. No. 4.77e+00;
1; Mismatches 3; Indels
                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 62; DB 13; Length 32;
Pred. No. 8.00e+00;
2; Mismatches 1; Indels
                                                                                                                                          .T 9
R70805 standard; Protein; 32 AA.
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R70789 standard; Protein; 69 AA.
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WPI; 95-082239/11.
Query Match 69.6%;
Best Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 67.4%;
Best Local Similarity 72.7%;
Matches 8; Conservative
                              8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hoogwerf AJ, Ledbetter SR;
WPI; 95-082239/11.
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                                                                                                                                                                                                                                                                                                  26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
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29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                            50 eicadprvpylk 61
                                                                                            1 EICLDPEAPFLK 12
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                                                                                                                                                                                                                                                                                                                                                    (UPJO ) UPJOHN CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UPJO ) UPJOHN CO.
                                                                                                                                                                                                                                                                                                                                                                                                    085374.
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                                                                                                                                                                          R70805;
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                              Matches
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Stimulating bone growth in mammals with neutrophil activating peptide(s) - partic. for diagnosis and treatment of osteoporosis claim 1, Page 23; 45pp; English.

The sequences given in R86011-12 represent NAP-2V and NAP-2 which are a variant and the wild type form of neutrophil-activating peptide. These peptides were used in the method of the invention for increasing bone growth. NAP-2V is a cleavage product of the platelet alpha-granule component platelet basic protein (PBP). It is related to NAP-2 in that NAP-2V has an additional 5 amino acids at its N-terminal. The N-terminal of NAP-2V resembles the N-terminal of human bone stimulating factor. These peptides are useful in the diagnosis and treatment of osteoporosis.
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                         NAP-27; NAP-2; variant; neutrophil-activating peptide; bone growth; cleavage product; human; bone stimulating factor; osteoporosis; platelet alpha-granule component platelet basic protein; PBP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Neutrophil-activating peptide-2; NAP-2; cathepsin D; cleavage; beta-thromboglobulin; precursor; alpha-granules; blood; platelet; connective-tissue-activating peptide III; CTAP-III; analog; clot; platelet basic protein; PRP.
vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
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Disclosure; Page 17; 24pp; English.
This sequence represents the amino acid sequence of neutrophil-
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0
                                                          Score 62; DB 13; Length Pred. No. 8.00e+00;
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                                                                                                                                                                                                                             R86012 standard; peptide; 70 AA.
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R36775 standard; peptide; 70 AA.
                                                                  67.48;
                                                                             Local Similarity 72.7%;
nes 8; Conservative
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Best Local Similarity 72.7%;
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15-NOV-1991; UG-792990.
(UTPE-) UNIV PENNSTLYANIA.
Gewirtz AM., PODCZ M;
WPI; 93-182235/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         11-APR-1995; CA0205.
18-APR-1994; US-229009.
                                                                                                                                                                                                                                                                                                                                                                                                                         (OSTE-) OSTEOPHARM LTD.
                                                                                                                              45 icldpdaprik 55
                                                                                                                                                               2 ICLDPEAPFLK 12
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                                69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 95-373633/48.
                                                                                                                                                                                                                                                                              Synthetic NAP-2.
                                                                                                                                                                                                                                                                                                                                          Synthetic.
WO9528172-A1.
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                                  Sequence
                                                                  Query Match
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                                                                                                                                                                                                                                            R86012;
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Sequence
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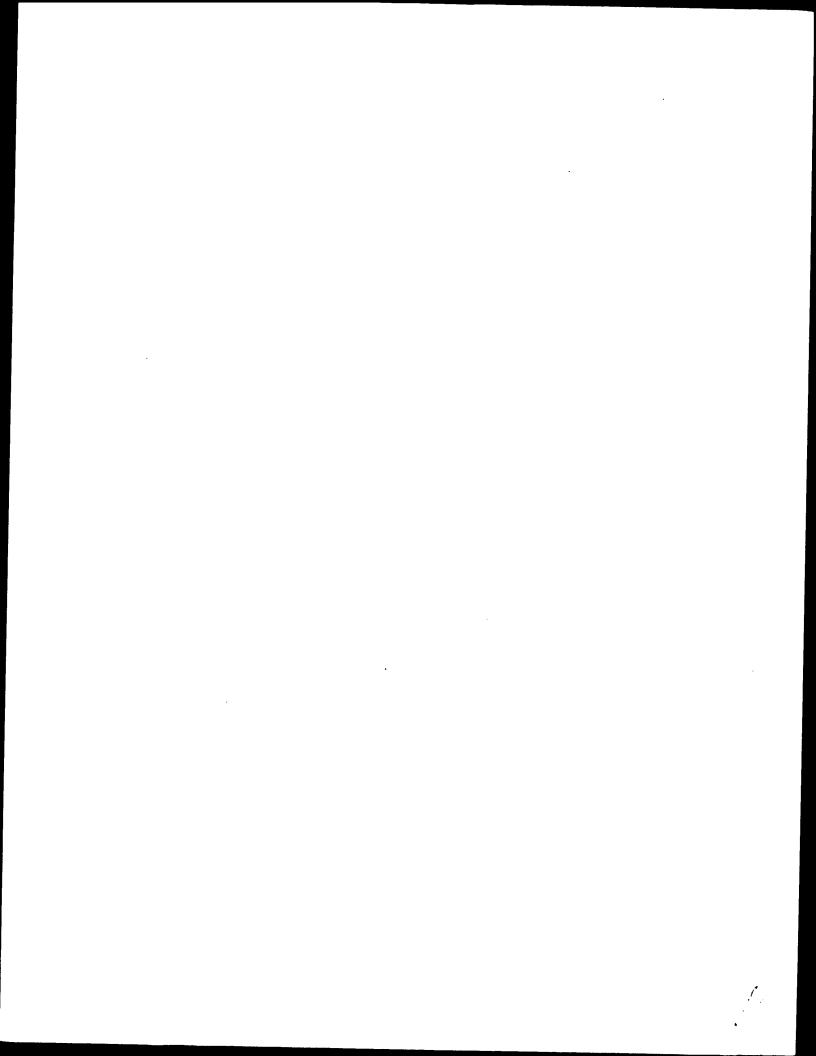
PS Claim i. Page 21, 43pp; English.

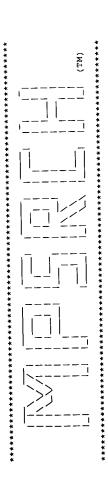
Claim i. Page 21, 43pp;

Claim
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activating peptide-2 (NAP-2). NAP-2 is a potent neutrophil activating agent produced by the cathepsin D-mediated cleavage of the eleven N-terminal amino acids of beta-thromboglobulin. It may also be generated by the cleavage of two inactive precursors, connective-tissue-activating peptide III (CTAP-III) and platelet basic protein (RRP), which are stored in the alpha granules of blood platelets. NAP-2 or NAP-2 analogs, with homology of >80%, may be used to lower blood levels of irculating platelets and to reduce the clot forming abilities of these platelets.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-DEC-1997 (first entry)
Neutrophil-activating peptide variant NAP-2V.
Neutrophil-activating peptide-2; NAP-2V; bone stimulating factor;
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                                                                                                                                                                                                                                                                                                                                                                        Score 62; DB 7; Le Pred. No. 8.00e+00; 2; Mismatches 1;
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W26467 standard; Protein; 75 AA.
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Best Local Similarity 72.7%;
Matches 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                        Query Match 67.4%;
Best Local Similarity 72.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                          8; Conservative
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26-SEP-1996; CA0653.
26-SEP-1995; US-004314.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          osteoporosis; therapy
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                                                                                                                                                                                                                                                                                                                     70 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                        wri: yə-s/aus/wo.
Stimulating bone growth in mammals with neutrophil activating stimulating bone growth in mammals with neutrophil activating peptide(s) - partic. for diagnosis and treatment of osteoporosis claim 1; Page 23; 45pp; English.
The sequences given in R86011-12 represent NAP-2V and NAP-2 which the sequences given in R86011-12 represent NAP-2V and NAP-2V and Invention for increasing bone growth. NAP-2V is a cleavage product of the platelet alpha granule component platelet basic protein (PBP). Is related to NAP-2 in that NAP-2V has an additional 5 amino acids at its N-terminal. The N-terminal of NAP-2V resembles the N-terminus of human bone stimulating factor. These peptides are
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Beta-thromboglobulin, heparanase; heparin; heparan sulfate;
arthritis; restenosis; cancer; wound healing.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 75;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful in the diagnosis and treatment of osteoporosis Sequence 75 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 16;
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R70788 standard; Protein; 81 AA.
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WPI; 95-082239/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 67.4%;
Local Similarity 72.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-AUG-1995 (first entry)
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26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                         (OSTE-) OSTEOPHARM LTD.
26-OCT-1995.
11-APR-1995; CA0205.
18-APR-1994; US-229009.
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                                                                                                                                                  WPI; 95-373633/48.
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protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:22:26 2000; MasPar time 5.28 Seconds 124.159 Million cell updates/sec Tabular output not generated. Run on:

>US-09-150-813-42 (1-12) from US09150813.pep 93 1 QVCADPSEEWVQ 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

179066 seqs, 54579741 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

sptremb19 Database:

1.sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_v1rus

Mean 25.308; Variance 35.370; scale 0.716 Statistics:

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	9.64e-08	1.41e-04	2.76e-03	4.48e-03	3.03e-02	3.03e-02	3.03e-02	7	4	4.85e-02	4	7	i.	Ή.	m	4.80e-01	7.50e-01	1.17e+00	_	1.1/e+00
Description		IL-10-INDUCIBLE CHEMOK	ORF K6.	MPIF-2.	CXC CHEMOKINE PRECURSO	BETA CHEMOKINE EXODUS-	SMALL INDUCIBLE CYTOKI	VMIP-1B.	BETA CHEMOKINE EXODUS-	NEUROTACTIN.		CC CHEMOKINE ST38 PREC	RANTES PRECURSOR.	CX3C CHEMOKINE PRECURS	ECO Q PROTEIN (FRAGMEN	CC CHEMOKINE EXODUS.	CC CHEMOKINE ABCD-1.	CHEMOKINE EXODUS.	LYMPHOTACTIN PRECURSOR	RADIAL SPOKEHEAD.
ΙĐ	014745	015467	098158	000175	043927	900600	009002	098157	000585	035188	035933	089093	043646	P78423	067634	P97884	088430	099664	057411	046178
DB	4	4	14	4	4	11	1	14	4	11	1	1	7	4	14	11	11	4	13	2
Query Match Length DB	80	120	95	119	109	133	133	94	134	395	395	97	91	397	203	96	9.2	1 5	97	552
Query Match 1	100.0	84.9	78.5	77.4	73.1	73.1	73.1	72.0	72.0	72.0	72.0	71.0	0		67.7	7		. 40	4.5	64.5
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TO1D3.3 PROTEIN.	SIMILARITY TO EGF-LIKE	KEO PROTEIN PRECURSOR.	DIMATIVE FOINERASE/DEH	FOIRITAGE PRINCIPLE	MACROPHAGE-DERIVED CHE	INTERLEUKIN-8 (FRAGMEN	EBI-1 LIGAND CHEMOKINE		1 DECTRIN DR	THE PROPERTY OF THE PARTY OF TH	CYTOKINE.	ORF UL154.	RNA POLYMERASE II LARG	LOW-DENSITY LIPOPROTEI	H GRAD MICANOGORAL MEG		GENES FOR USI, USIU, U	1-AMINOCYCLOPROPANE-1-	LOW DENSITY LIPOPROTEI	VENCTOR	LOW DENGTIL LILE OF SOLUTION	TYROSINE KINASE.	V-SERA 1.	FAST MYBP-C.	CX A CAA IACTEGRACIONIA		B2168_C1_194.		CYTOCHROME B-245, BETA
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ALIGNMENTS

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) ;; EU	IIO M., MIURA R., IS M., MIURA R.,	Length 80;		<u>(</u> 2
; 80 AA. ED) SEQUENCE UPDATE) ANNOTATION UPDATE) NT).	K., NAKASHIMA H., NOMIYAMA H., IIO NANK/DDBJ DATA BAN	Lend B; 0;		; 120 AA. ED) SEQUENCE UPDATE) ANNOTATION UPDATE)
; 80 AA. ED) SEQUENCE UPDATE) ANNOTATION UPDAT :NT).	SHIMP H., DATA	. BETA. CRC32; DB 4; L 9.64e-08; tches 0		AA. EUPE
80 A SNCE PATIC	K., NAKASHIMI NOMIYAMA H., SANK/DDBJ DATI	שב מ		120 JENCE STAT
SEQUE SEQUE ANNOT NT).	K., NOMI ANK/ _CC;	POTENTIAL. LD78 ALPHA 3F87F1C6 CF core 93; I red. No. 9 0; Mismatc		
1 1 PRELIMINARY; PRT; 80 AA. 214745. 214745. 214745. 214745. 214745. 21.NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE) 01.NOV-1999 (TREMBLREL. 09, LAST SEQUENCE UPDATE) 101.JAN-1999 (TREMBLREL. 09, LAST ANNOTATION UPDATE) HOMO SAPIENS (HUMAN). EURARACHER, METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; CATARRHINI; HOMINIDAE; HOMO.		POTENTIA: LD78 ALP 3F87F1C6 Score 93; Pred. No. 0; Mism		PRT; CREATED) LAST SEQ LAST ANN
01, C; 01, L; 09, L; DR (FR XDATA;	R., NARUSE OHMOTO Y., TO EMBL/GENE	**		
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RELIMINARY TREMBLREL. TREMBLREL. TREMBLREL. TREMBLREL. (HUMAN). GHOMAN).	N.A. IGATA-YI KIN Y., G-1995) T D1010501	18;	0 76 0 12	PRELIMINARY (TREMBLREL. (TREMBLREL. (TREMBLREL. BLE CHEMOKI
14745 14745; 117475; 11.7476; 11	SEQUENCE FROM N.A. SEQUENCE FROM N.A. ISHIZUKA K., IGATA-YI KATSURAGI S., KIN Y., KUTSKAWA T., SUBMITTED (ANG-1995) T EMBL; D63785; D1010501 PROSITE; PS00472; SMA	SIGNAL. SIGNAL. SIGNAL. SIGNAL. SIGNAL. SIGNAL. SIGNAL. SIGNAL. TO 80 SEQUENCE 80 AA: 8857 MW TY MAtch. Ty Match. Ty Match. To Conservative chees.	QVCADPSEEWVQ 	2) PRELIMINARY; 2) 15467; 01-5407; 01-540-1998 (TREMBLREL. 05 01-540-1998 (TREMBLREL. 05 01-00V-1998 (TREMBLREL. 05 11-10-1NDUCIBLE CHEMOKINE.
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1 214745 214745; 211-NV-1996 01-UAN-1996 01-JAN-1999 01-JAN-1999 EDTAN-1999 CATARRYCTA; CATARRHINI;	[1] SEQUENCE FF IISSUE=BRAJ ISHIZUKA K. KATSURAGI S MIYAKAWA T. SUBMITED (EMBL; D6378 PROSITE; P8	PFAM; PFI SIGNAL. SIGNAL. CHAIN NON_TER SEQUENCE TY MATCH T L LOCAL		T 2 015467 015467; 01-JAN-1998 01-JAN-1998 11-10-INDUC ILINCK OR S
1 014745 014745; 0101-NOV-1996 01-JAN-1999 01-JAN-1999 LD78 ALPHA LD78 ALPHA CATARRHINI;	[1] SEQU TISS TISS ISHI KATS MIYA SUBM EMBL	PFAM; PFF SIGNAL. NON_TER SIGNAL CHAIN NON_TER SEQUENCE SEQUENCE Best Local Matches	9	LT 2 015467 015467 01-JAN 01-JAN 01-NOV IL-10-
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 HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                   MEDLINE; 98308096.
YOUN B.S., ZHANG S., BROXMEYER H.E., ANTOL K., FRASER M.J. JR., HANGOC G., KWON B.S., "Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with myelosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y., "Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S., "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                             SHOUDAI K., HIESHIMA K., FUKUDA S., IIO M., MIURA R., IMAI T., YOSHIE O., NOMIYAMA H.;
BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Juery Match
84.9%; Score 79; DB 4; Length 120;
dest Local Similarity 50.0%; Pred. No. 1.41e-04;
datches 6; Conservative 6; Mismatches 0; Indels
                                                                        HEDRICK J.A., HELMS A., GORMAN D., ZLOINIK A.;
SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                             SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
GAMMAHERPESVIRINAE; RHADINOVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                             activity.";
BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998).
EMBL; HAGGASE1781;
EMBL; AB007454; D1024963;
EMBL; AR088219; G37193365;
EMBL; AF0855467; G3395776;
PFAM; PF00048; il8; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE UPDATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE 120 AA; 13600 MW; A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             098158; 012569;
01-FEB-1997 (TREMBLREL: 02, CREATED)
01-JUL-1997 (TREMBLREL: 04, LAST SEQU
01-NOV-1998 (TREMBLREL: 08, LAST ANN
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1 QVCADPSEEWVQ 12
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CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                    SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                         SEQUENCE FROM N.A.
NICHOLAS J., RUYOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D.,
HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
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PATEL V.P., KREIDER B.L., LI Y., LI H., LEUNG K., SALCEDO T.,
NARDELLI B., PIPPALLA V., GENTZ S., THOTAKURA R., PARMELEE D.,
GENTZ R., GAROTTA G.,
J. EXP. MED. 0:0-0(0).
EMBL; U85768; G1916252; -.
PFAM: PF00048; i18; 1.
SEQUENCE 119 AA; 13119 MW; CDF526F0 CRC32;
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PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 97296220.
NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 73; DB 14; Length 95; Pred. No. 2.76e-03; 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17.4%; Score 72; DB 4; Length 119; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUN R., LIN S.-F., MILLER G., SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS. BMBL: 075698; G1718266; --BMBL: 07589; G1265273; --BMBL: 093872; G224546; --BMBL: 071366; G3551763; --BMBL: 071366; G35717636; --BMBL: 071366; --BMBL: 0713666; --BMBL: 071366; --BMBL: 071366; --BMBL: 071366; --BMBL: 0713
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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SEQUENCE 95 AA; 10485 MW; 5283348D CRC32;
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J. VIROL. 71:4187-4192(1997).
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04,
08,
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Local Similarity 66.7%;
es 8; Conservative
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01-NOV-1998 (TREMBLREL.
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000175
000175;
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043927
043927;
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PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                     Match
Local Similarity 58.3%;
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                                                                                                   7; Conservative
                                                                                                                                                                                                                                                                    PRELIMINARY;
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1 QVCADPSEEWVQ 12
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                                                                                                                                           73 ELCANPEEGWVQ 84
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098157
098157;
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                      SEQUENCE
                                                                Query Match
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009002
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                           HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                   LEGIER D. F., LOFISCHER M., STUBER ROOS R., CLARK-LEWIS I., BAGGIOLINI M., MOSER B.;
BAGGIOLINI M., MOSER B.;
B cell-attracting chemokine 1, a human CXC chemokine expressed in Iymphoid tissues, selectively attracts B lymphocytes via
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "A B-cell-homing chemokine made in lymphoid follicles activates Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
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Pred. No. 3.03e-02;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAPOLITANO M., SPINETTI G., GAETANO C., CAPOGROSSI C.M.; SUBMITTED (CCT-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AJ002211; E1249325; -. EMBL; AF044197; G2911376; -. EMBL; AF029894; G3169814; -.
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               01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)

        SIGNAL
        1
        22
        POTENTIAL.

        CHAIN
        23
        109
        POTENTIAL.

        SEQUENCE
        109
        AA;
        12664
        MW;
        BE5A46BC
        CRC32;

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01-AUG-1998 (TREMBLREL. 07, LAST SEQU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 63.6%;
7; Conservative
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                                                                                   CXC CHEMOKINE PRECURSOR.
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HROMAS R.A.;
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MEDLINE; 97444139.
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EUKRRYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN X., CIUFO D., HICHOLAS J., RUVOLO V.R., HAVWARD G.S., REITZ M.S.; HENDRICKSON S., GUO H.G., HAVWARD G.S., REITZ M.S.; SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-THYMUS;
TANABE S., LUO Y., QUACKENBUSH E.J., BERNAN M.A.,
TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., JACOBS K.A., DORF M.E.;
COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A., DORF M.E.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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                                                           Gaps
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"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
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Pred. No. 3.03e-02;
3; Mismatches 2; Indels
Score 68; DB 11; Length 133;
Pred. No. 3.03e-02;
3; Mismatches 2; Indels
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VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
GAMMAHERPESVIRINAE; RHADINOVIRUS.
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LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                          009002;
01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
SMALL INDUCIBLE CYTOKINE A21 (TCA4).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KAPOSI'S SARCOMA-ASSOCIATED HERPES-LIKE VIRUS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Mismatches
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                                                              3; Mismatches
                                                                                                                                                                                                                                                                                         133 AA.
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                                                                                                                                                                                                                                                                                               PRT;
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01-FEB-1997 (TREMBLREL. 02,
01-NOV-1998 (TREMBLREL. 08,
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Matches 7: Contact
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                                                                                                            RUSSO J.J. BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; "Nucleotide sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOMO SAPIENS (HUMAN).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                SEQUENCE FROM N.A.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D.,
PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.;
SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                  RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA D., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
             MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.; "Molecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
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"Cell-homologous genes in the Kaposi's sarcoma-associated
rhadinovirus human herpesvirus 8: determinants of its
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Pred. No. 4.85e-02;
1; Mismatches 2; Indels
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HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., BROXMEYER H.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
SUN R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U67775; G1562496;
EMBL; U75698; G1718264;
                                                                                                                                                                      PROC. NATL. ACAD. SCI. U.S.A. 93:14862-14867(1996).
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01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94 AA; 10486 MW; 91312200 CRC32;
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                                                      SCIENCE 274:1739-1744(1996).
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EMBL; U71365; G3551760; -
PFAM; PF00048; 118; 1.
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72.0%;
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                                                                                   SEQUENCE FROM N.A.
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   MEDLINE; 97094384
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                                                                                                   MEDLINE;
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000585
000585;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                 MEDLINE; 97320499.
PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO J., VATH J., GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., CULPEPPER J., "Neuroteactin, a membrane-anchored chemokine upregulated in brain inflammation.";
NATURE 387:611-617(1997).
RABL. APO10586; G23371698;
MGD: MGI:1097153; SCYDI.
PPRAM; PF00048; 118; 1.
SEQUENCE 395 AA: 42098 MW; E3CD0612 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN=BALB/C; TISSUE-BRAIN;
ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENKINS N.,
ZLOTNIK A., BAZAN J.F.;
                                                                                                                                                                                    Length 134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72.0%; Score 67; DB 11; Length 395; 80.0%; Pred. No. 4.85e-02; Ative 0; Mismatches 2; Indels
                                                                                                                                                                                                         2; Indels
[3]
SEQUENCE FROM N.A.
HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                  LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                          Ouery Match
72.0%; Score 67; DB 4; LA
Best Local Similarity 66.7%; Pred. No. 4.85e-02;
Matches 8; Conservative 2; Mismatches 2.
                                                                                                                                                                                                                                                                                                    395 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT; 395 AA.
                                                                                                                                                                                                                                                                                                                           CREATED)
                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                  01-JAN-1998 (TREMBLREL. 05, 01-JAN-1998 (TREMBLREL. 05, 01-NOV-1998 (TREMBLREL. 08, NEUROTACTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       larity 80.0%;
Conservative
                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                         73 ELCADPKELWVQ 84
                                                                                                                                                                                                                                       1 QVCADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 97320499.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74 CADPKEKWVQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 CADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FRACTALKINE
                                                                                                                                                                                                                                                                                 LT 10
035188
035188;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LT 11
035933
035933;
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MEDLINE; 96074534.
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Q67634
Q67634;
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                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                        Query Match
                                                                                SIGNAL.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                        CHAIN
                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
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EUKREYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MUS MUSCULUS (MOUSE).
BUKRYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation."; J. NEUROIMMUNOL. 0:0-0(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F., DA SILVA J.,
LESSLAUER W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 66; DB 11; Length 97;
Pred. No. 7.73e-02;
2; Mismatches 1; Indels
                                                                                                                                                    Length 395;
                                                                                                                                     Score 67; DB 11; Length 399
Pred. No. 4.85e-02;
Wilmatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AD005313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U92565; G2459677; -. PFAM; PF00048; 118; 1. SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TREMBLREL. 08, LAST SEQUENCE UPDATE) (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC CHEMOKINE ST38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    97 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL 1 27
CHAIN 28 97
SEQUENCE 97 AA; 10826 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; Conservative
                                                                                                                                                              Ouery Match 72.0%;
Best Local Similarity 80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                        8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SECUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 VCADPKQNWV 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 VCADPSEEWV 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RANTES PRECURSOR.
                                                                                                                                                                                                                                                                                                                                           3 CADPSEEWVO 12
                                                                                                                                                                                                                                                                                74 CADPKEKWVQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             043646;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T 13
043646
                                                                                                                                                                                                                                                                                                                                                                                                                               LT 12
089093
089093;
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CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., MASON T.M.,
ADAMS M.D., LOFTUS B.J., KERLAVAGE A.R., VENTER J.C.;
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"HOMO SAPIENS Chromosome 16 BAC clone CIT987SK-A-152E5.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BAZAN J.F., BACON K.B., HARDIMAN G., WANG W., SOO K., ROSSI D GREAVES D.R., ZICHTIK A., SCHALL T.J.;
GREAVES D.S., ZICHTIK A., SCHALL T.J.;
"A new class of membrane-bound chemokine with a CX3C motif.";
NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 64; DB 4; Length 397;
Pred. No. 1.94e-01;
1; Mismatches 1; Indels
                                                                                                                                                                       Score 65; DB 4; Length 91;
Pred. No. 1.23e-01;
2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VIRUSES; DSDNA VIRUSES, NO RNA STACE; HERPESVIRIDAE;
ALPHAHERPESVIRINAE; VARICELLOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL 1 24 POTENTIAL.
CHAIN 25 397 CX3C CHEMOKINE.
SEQUENCE 397 AA; 42202 MW; C8093D7D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                203 AA
                                                                                                                                   CF404FAD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                              397 AA
EMBL; AF043341; G2905632; -.
EMBL; AF088219; G3719366; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                              POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQU
01-NOV-1998 (TREMBLREL. 08, LAST ANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; 091835; G1899259; --
EMBL; 084487; G1888523; --
EMBL; ACO04382; G3252821; --
EMBL; PFO0048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           larity 77.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ECO Q PROTEIN (FRAGMENT).
GALLID HERPESVIRUS TYPE 1.
                                                                                              1 23
24 91
91 AA; 9990 MW;
                                                                                                                                                                                   Match 69.9%;
Local Similarity 58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CX3C CHEMOKINE PRECURSOR.
                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                               71 QVCANPEKKWVR 82
                                                                                                                                                                                                                                                                                                                         1 QVCADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN-GA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74 CADPKEQWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                             LT 14
P78423 PREL
P78423; 000672;
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Page 6

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RA PENG Q., ZENG M., BHUIYAN Z.A., UBUKATA E., TANAKA A., NONOYAWA M.,
RT TSOJALION and Characterization of Marek's disease virus (MDV) cDNAs
RT Mapping to the BanHI-12, BamHI-Q2, and BanHI-L fragments of the MDV
RT Infected with MDV.".
RT VIROLOGY 213:590-599(1995).
DR EMBL: U34966; G1185444; -..
DR EMBL: U34966; G1185444; -..
DR PFAM; PFO0048; i18; 1...
SC SEQUENCE 203 AA; 23132 MW; 887D04C3 CRC32;
QUELY MATCH
Best Local Similarity 63.6%; pred. No. 3.06e-01;
Matches 7; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
DR 145 VCVDPEAPWVQ 155
QY 2 VCADPSEEWVQ 12
Search completed: Fri Feb 4 17:23:23 2000
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(TM)	*****

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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:22:02 2000; MasPar time 2.55 Seconds 132.908 Million cell updates/sec MPsrch_pp

Run on:

Tabular output not generated.

>US-09-150-813-42 (1-12) from US09150813.pep 93 Title: Description: Perfect Score:

1 QVCADPSEEWVQ 12 Sequence:

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

swiss-prot37 1:swissprot Database:

Mean 25.461; Variance 34.416; scale 0.740 Statistics: pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	2.07e-08	2.07e-08	9.35e-07	4.63e-06	6.33e-05	1.05e-04	1.06e-04	1.06e-04	1.77e-04	2.94e-04	2.94e - 04	2.94e-04		8.08e-04	8.08e-04	•	8.08e-04	1.33e - 03	1.33e-03	1.33e - 03	2.19e-03	2.19e-03	2.19e-03	
Description	MACROPHAGE INFLAMMATOR	TONSILLAR LYMPHOCYTE L	MACROPHAGE INFLAMMATOR			MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P		MACROPHAGE INFLAMMATOR	CHEMOKINE CC-1 PRECURS		CHEMOKINE CC-3 PRECURS	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	T-CELL SPECIFIC RANTES	I-CELL SPECIFIC RANTES	MACROPHAGE INFLAMMATOR	
. Д	MI1A_HUMAN	MI10_HUMAN	MI1B_HUMAN	MI1B_RABIT	MI1A_RAT	MCP1_CAVPO	MCP1_RAT	MCP1_MOUSE	MI1B RAT	MIIB CHICK	MCP4_HUMAN	MCP3_HUMAN	MIP4_HUMAN	MI1B MOUSE	CCC1_HUMAN	MCP2_PIG	CCC3_HUMAN	MCP2 BOVIN	MCP1 HUMAN	MCP1 CANFA	SISD MOUSE	SISD RAT	MITA MOUSE	
DB	<u>.</u> –	Н	Н	Н	٦	Н	~	Ч	-	н	Н	Н	٦	1	Н	Н	Н	Н	_	, ,	-,	-	-	1
% Query Match Length	92	93	92	92	92	120	148	148	92	06	86	66	89	92	6	66	109	66	66	101	16	9.2	00	1
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Score	93	63	98	83	78	77	77	77	76	7.5	7.5	75	7.4	73	7.3	7.3	7.3	7.2	12	7.2	7.5	71	1.5	1
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2.19e-03 3.59e-03 3.59e-03 3.59e-03	5.86e-03 5.86e-03 5.86e-03	9.53e-03 9.53e-03	9.53e-03 1.54e-02	1.54e-02 2.50e-02	2.50e-02 2.50e-02	4.01e-02 4.01e-02	4.01e-02 4.01e-02	6.43e-02 6.43e-02
MONOCYTE CHEMOTACTIC P INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P MONOCYTE CHEMOTACTIC P MONOCYTE CHEMOTACTIC P		MONOCYTE CHEMOTACTIC P INTERLEUKIN-8 PRECURSO	C10 PROTEIN PRECURSOR. EOTAXIN PRECURSOR (EOS	INTERLEUKIN-8 PRECURSO EMBRYO FIBROBLAST PROT	T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES	T-CELL SPECIFIC RANTES EOTAXIN PRECURSOR (EOS	INTERLEUKIN-8 PRECURSO MACROPHAGE INFLAMMATOR
MCP1_PIG IL8_CANFA IL8_SHEEP IL8_PIG	MCPB_BOVIN MCP2_HUMAN MCP1_RABIT	EOTA_KAT EOTA_MOUSE MCPA_BOVIN	MCP5_MOUSE	C10_MOUSE EOTA_HUMAN	IL8_HUMAN EMF1_CHICK	SISD_PIG SISD_HUMAN	SISD CAVPO	IL8_RABIT MI1G_MOUSE
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99 101 101 103	74 99 125	7 0 0 7 0 0	104	116	99	50	91	101
76.3	74.2	73.1	73.1	72.0	71.0	6.6	0.00	88.8
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                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its muse by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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   -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-AUG-1990 (REL. 15, CREATED)
01-AUG-1990 (REL. 15, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
TONSILLAR LYMPHOCYTE LD78 BETA PROTEIN PRECURSOR (GOS19-2 PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IRVING S.G., ZIPFEL P.F., BALKE J., MCBRIDE O.W., MORION C.C., BURD P.R., SIBBENLIST U., KELLY K.,
"Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q";
NUCLBIC ACIDS RES. 18:3261-3270(1990)."
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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MEDLINE; 90287155.
NAKAO M., NOMIYAMA H., SHIMADA K.;
"Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 93; DB 1; Length 92;
Pred. No. 2.07e-08;
0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; i18; 1. HSSP; P13236; 1HUN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA CELL BIOL. 9:589-602(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92 AA; 10085 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIR; A30574; A30574.
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191336; P22617; 013704;
01-JAN-1990 (REL. 13, CREATED)
01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
01-JAN-1997 (REL. 13, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (T-CELL ACTIVATION PROTEIN 2) (ACT -2) (PAT 744) (H400) (SIS-GAMMA) (LYMPHOCYTE ACTIVATION GENEL 1 PROTEIN) (LAG-1) (HC21) (SMALL INDUCIBLE CYTOKINE
A4) (G-26 T LYMPHOCYTE-SECRETED PROTEIN).
                  MOL. CELL. BIOL. 10:3646-3658(1990).
-!- SIMILARITY: 464.1 AND 464.2 ARE VERY CLOSELY RELATED.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LIPES M.A., NAPOLITANO M., JEANG K.-T., CHANG N.T., LEONARD W.J.; "Identification, cloning, and characterization of an immune activation gene."; PROC. NATL. ACAD. SCI. U.S.A. 85:9704-9708(1988).
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LD78 BETA / GOS19-2 / 464.2.
BY SIMILARITY.
2 IBDD804 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                       EMBL; X52149; G296666; --
EMBL; M24110; G182849; --
EMBL; D90145; G219908; --
PIR; B30908; B30908.
PIR; B30412; B30412
PIR; B36412; B3673.
PIR; S10157; S10157.
MIM; 601395; --
PROSTIF; P800472; SMALL_CYTOKINES_CC; 1.
PFAM; PF336; 118; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10161 MW;
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                                                                                                      C-C) (CHEMOKINE CC).
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58
74
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35
93 AA;
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EUKARYOTA; METAZOA;
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expression.";
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- INDUCTION: BY MITOGENS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LODI P.J., GARRETT D.S., KUSCEWSKI J., TSANG M.L.S., WEATHERBEE J.A., LEDRARD W.J., GRNDENBORN A.M., CLORE G.M.; he beta chemokine hMIP-1 beta "High-resolution solution structure of the beta chemokine hMIP-1 beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCIENCE 263:1762-1767(1994).
-i- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-i- SUBUNIT: HOMODIMER.
                                                                                                                                                                                                                                                                                                                    "The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/Tax responsiveness of 5' upstream sequences, and chromosomal
                                                                                                        VICASA-PEQUIGNOT E., HERCEND T., TRIEBEL F.;
VICASA-PEQUIGNOT E., HERCEND T., TRIEBEL F.;
"Cloning and expression of a lymphocyte activation gene (LAG-1).";
MOL. IMMUNOL. 27:1091-1102(1990).
                                                                                                                                                                                                                                                                                               NAPOLITANO M., MODI W.S., CEVARIO S.J., GNARRA J.R., SEUANEZ H.N.,
                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 90038522.
MILLER M.D., HATA S., WAAL MALEFYT R., KRANGEL M.S.;
"A novel polypeptide secreted by activated human T lymphocytes.";
J. IMMUNOL. 143:2907-2916(1989).
                                                                                                                                                                                                    CHANG H.C., REINHERZ E.L.; risolation of a cDNA encoding a putative "Isolation and characterization of a cDNA encoding a putative on cytokine which is induced by stimulation via the CD2 structure on
 BROWN K.D., ZURAWSKI S.M., MOSMANN T.R., ZURAWSKI G.;
"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. IMMUNOL. 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                 calization.";
BIOL. CHEM. 266:17531-17536(1991).
                                                                                                                                                                                                                                           human T lymphocytes.";
EUR. J. IMMUNOL. 19:1045-1051(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      M69201; G1332376; JOINED. M69202; G1332376; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G34218; -.
E35870; ALT_SEQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G339727; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G602455; -.
G178018; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; M23502; G533213; -.
                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 6-92 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G1332376;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    by multidimensional NMR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G32036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; B30574; B30574.
PIR; D30552; D30552.
PIR; JH0319; JH0319.
                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRUCTURE BY NMR. MEDLINE; 94182137
                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                               MEDLINE; 89325421
                                                                                                    91061800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X53683;
EMBL; X53682;
                                                                                                                                                                                                                                                                                                                                                        localization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i-SUBUNIT: HOMODÍMER (BY SIMILARITY).
-i-SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 34, LAST ANNOTATION UPDATE)
01-OCT-1995 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (IMMUNE
ACTIVATION PROTEIN 2) (ACT-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
EY SIMILARITY.
T -> C (IN REF. 7).
P -> L (IN REF. 5).
P -> L (IN REF. 2).
ARKLPR -> REASS (IN REF. 3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                           INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUKARYOTA; METAZOA; CHÒRDATA; VERTEBRATA; MAMMALIA; EUTHERLA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                        (IN REF. 3).
                                                                                                                                                                                                                                                                                                                                                                                                                              Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                         score 86; DB 1; Let
Pred. No. 9.35e-07;
0; Mismatches 1;
                                                                                                                                                                                                           ARKLPR -> REASS (
S -> I (IN REF. 7
S -> G (IN REF. 6
S -> T (IN REF. 7
                                                                                                                                                                                                                                                                                                                                                                                                   10212 MW; F18E7AFD CRC32;
                                                  PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPON
                                                                                                                                                                                                                                                                                                                                                                                                                                 , Match 92.5%; Score 86; Local Similarity 91.7%; Pred. No. 91.7%; Pred. No. 91.7%; Pred. No. 91. Conservative 0; Mismat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORYCTOLAGUS CUNICULUS (RABBIT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; D17402; G599578; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=NEW ZEALAND WHITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                   72 QVCADPSESWVQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 OVCADPSEEWVO 12
          1HUM; 30-APR-94.
1HUN; 30-APR-94.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 94198229.
A37411; A37411
                                                                                                                       224
334
400
700
800
800
777
80
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CONFLICT
CONFLICT
CONFLICT
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                                                                                                                                      DISULFID
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                                                                                                                                                                                                                                                                                                   STRAND
                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1

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C STRAIN=WISTAR;

X MEDLINE; 96183056.

A MAKAGAWA H. SHIOTA S., TAKANO K., SHIBATA F., KATO H.;

ANAKAGAMA H. SHIOTA S., TAKANO K., SHIBATA F., KATO H.;

T "CYTCAKine-induced neutrophil chemostractant (CING)-2 alpha, a novel

XT member of rat GRO/CINGs, is a predominant chemokine produced by

I ipopolysaccharide-stimulated rat macrophages in culture.";

II DECHEM. BIOPHYS. RES. COMMUN. 220:45-948 (1996).

SC -!- FUNCTION: MONOKINE WITH INTAMANARY AND CHEMOKINETIC ROPPERTIES.

BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG THE-ALPHA

MAY FONDUCTION, NEUTROPHIL RECRUITMENT AND SUBSEDURIT LUNG INJURY AND

PRODUCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE

CC PRODUCTION OF THE-ALPHA WHICH IN TURN UP-REGULATES VASCULAR

PRODUCTION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMBL outstation use by non-profit institutions as long as its content is in no way entities requires a license agreement (see the: "See the second for commercial or send an email to license@isb-sib.ch).
                                                            BY SIMILARITY.
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INDICTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMORINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHI M.M., GODLESKI J.J., PAULAUSKIS J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages.";
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                               01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHANLEY T.P., SCHMAL H., FRIEDL H.P., JONES M.L., WARD P.A.; "Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                              RATTUS NORVEGICUS (RAT).
EUKARKOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                 1; Indels
                                                                                                                                                          Score 83; DB 1; Length 92;
                              CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                          Pred. No. 4.63e-06;
1; Mismatches 1
                                                                                                                            A629AB2D CRC32;
                                                                                                                                                                                                                                                                                                                             92 AA.
                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ite lung injury in rats.";
IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=LONG EVANS; TISSUE=LUNG; MEDLINE; 95238980.
                                                                                                                    92 AA; 10066 MW;
                                                                                                                                                          Match
Local Similarity 83.3%;
                                                                                                                                                                                      10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN-CD-1; TISSUE-LUNG;
MEDLINE; 95298037.
                                                                                                                                                                                                                                                                                                                       STANDARD;
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                    72 QVCANPSESWVQ 83
                                                                                                                                                                                                                                                  1 OVCADPSEEWVQ 12
                       P13236; 1HUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 24-57.
                                                                                                   DISULFID
SEQUENCE
                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                      LT 5
MI1A_RAT
P50229;
                                                                                                                                                      Query Match
                                                                                                                                                                                 Matches
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                                                                   CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1- SUBBUILT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                   CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                               01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
                                                                                                                                                                                                         2; Indels
                                                                                                                                                                              Score 78; DB 1; Length 92;
Pred. No. 6.33e-05;
                                                                                                                               A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
22FAD257 CRC32;
                                                                                                             BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
                                PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1. HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                PRT;
                                                                                          24 92 M2
34 57 B3
35 73 B3
57 57 C
92 AA; 10335 MW; 3
                                                                                                                                                                                       75.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13741 MW;
                                                                                                                                                                                                   9; Conservative
          EMBL; U22414; G790633; -
EMBL; U06435; G459150; -
                                                                                                                                                                                                                                                                                                                                                               CHEMOATTRACTANT PROTEIN-1)
                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=Z; TISSUE=SPLEEN; MEDLINE; 93267104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; L04985; G349821; -.
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24
                                                                                                                                                                                                                                           1 OVCADPSEEWVO 12
                                                                                                                                                                                                                       71 QICADPKETWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57
73
                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97
120 AA;
                                                                                                                                                                                                                                                                                                                                                                          SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YOSHIMURA T.;
                                                                                                                                                                                                                                                                                JT 6
MCP1_CAVPO
                                                                                                                DISULFID
CONFLICT
                                                                                                        DISULFID
                                                                                                                                                   SEQUENCE
                                                                                                                                                                           Query Match
                                                                                                                                         CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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DB 1; Length 120;

Score 77;

82.8%;

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Best Local Similarity
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                                                                                   SOLUTION OF STANTARY 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -:- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIMMERS H.T.H.M., PRONK G.J., BOS J.L., VAN DER EB A.J.;
"Analysis of the rat JE gene promoter identifies an AP-1 binding site
essential for basal expression but not for TPA induction.";
NUCLEIC ACIDS RES. 18:23-34(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YOSHIMURA T., TAKEYA M., TAKAHASHI K.; "MOlecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its expression in rat spleen cells and tumor cell lines."; BIOCHEM. BIOPHYS. RES. COMMUN. 174:504-509(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.

BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROTEIN 1.

PYRROLIDONE CARBOXYLIC ACID (BY
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                   01-APR-1990 (REL. 14, CREATED)
01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
01-APR-1999 (REL. 36, LAST NNOTATION UPDATE)
MONOTYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (IMMEDIATE-EARLY
SERUM-RESPONSIVE JE PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 77; DB 1; Length 148;
Pred. No. 1.06e-04;
3; Mismatches 1; Indels
                                Indels
Pred. No. 1.06e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB97F97C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16460 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN-WAG/RIJ; TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8; Conservative
                   Best Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; M57441; G205334; -. PIR; JN0128; JN0128. PIR; S07723; S07723.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; X17053; G55531; -.
                                       8; Conservative
                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                       RATTUS NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PFAM; PF00048; 118; 1.
HSSP; P13500; 1DOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             73 EICADPNKEWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ::||||: ||||
1 QVCADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                              71 EVCADPTOKWVO 82
                                                                                                                        1 QVCADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 91128376.
                                                                                                                                                                                                                                                                                                                                                   SCYA2 OR JE OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 90174947.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOD_RES
                                                                                                                                                                                                         MCP1_RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                               P14844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                           Matches
                                                                                                                                                                                          RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-i- INDUCTION: BY PLATELET-DERIVED GROWTH FACTOR.
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VAN DAMME J., DECOCK B., BERTINI R., CONINGS R., LENAERTS J.-P., VAN DAMME J., DECOCK B., MANTOVANI A.;
"Production and identification of natural monocyte chemotactic protein from virally infected murine fibroblasts. Relationship with the product of the mouse competence (JE) gene.";
EDR. J. BIOCHEM. 199:223-229(1991).
--- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ROLLINS B.J., MORRISON E.D., STILES C.D.; "Cloning and expression of JE, a gene inducible by platelet-derived growth factor and whose product has cytokine-like properties."; PROC. NATL. ACAD. SCI. U.S.A. 85:3738-3742(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                  KAWAHARA R.S., DEUEL T.F.;
Piplatelet-derived growth factor-inducible gene JE is a member of a
family of small inducible genes related to platelet factor 4.";
J. BIOL. CHEM. 264:679-682(1989).
                                                                               01-WAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (PLATELET-DERIVED
GROWNH FACTOR-INDUCIBLE PROTEIN JE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERLA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 77; DB 1; Length 148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 1.06e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16326 MW; B7572BBC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
BY SIMILARITY.
                   148 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY
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                                                                            01-MAR-1989 (REL. 10, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82.8%;
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EMBL; M19681; G387168; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; A30861; A30861.
PIR; S16226; S16226.
MGD; MGI:98259; SCYA2.
PROSITE; PS00472; SMALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PF00048; 118; 1. P13500; 1DOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
148
24
                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOTAXIS;
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35
126
148 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR; A30209; A30209.
                                                                                                                                                                                                                                           MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                               SCYA2 OR MCP1 OR JE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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LT 8
MCP1_MOUSE
P10148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE;
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                                                                                                                                                                                                                              STRAIN-LONG EVANS; IISSUE-LUNG;
JONES M.L., SHANLEY T.P., SCHAAL H., FRIEDL H.P., WARD P.A.;
JONES M.L., SHANLEY T.P., SCHAAL H., FRIEDL H.P., WARD P.A.;
SUBMITTED (FEB-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-BONE MARROW;
MEDLINE; 95369710.
PETRENKO O., ISCHENKO I., ENRIETTO P.J.;
"Isolation of a cDNA encoding a novel chicken chemokine homologous to mammalian macrophage inflammatory protein-1 beta.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY.
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                             01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-0CT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA).
SCYA4 OR MIPLE.
          ..
0
                                                                                                                                                                                  EUKARYOTA; METAZOA; CHÓRDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHÖRDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1997 (REL. 35, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA HOMOLOG PRECURSOR.
GALLUS GALLUS (CHICKEN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 76; DB 1; Length 92;
Pred. No. 1.77e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3C82B006 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92 AA; 10234 MW;
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 81.88;
                                                                                             STANDARD;
                                                                                                                                                                      RATTUS NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U06434; G459148; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                       73 EVCADPKKEWVQ 84
                                           1 QVCADPSEEWVQ 12
                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 QICADPSEPWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 QVCADPSEEWV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
 6
                                                                             LT 9
MI1B_RAT
P50230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MI1B_CHICK
Q90826;
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SEQUENCE
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Matches
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                                                                                                                                                                               SUBUNIT: HOMODÍMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                         PETRENKO O., ENRIETTO P.J.;
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE, 96635049.

UGUCCIONI M., LOETSCHER P., FORSSMANN U., DEWALD B., LI H., LIMA S.H.,
LI Y., KREIDER B., GAROTTA G., THELEN M., BAGGIOLINI M.;

"Monocyte chemotactic protein 4 (MCP-4), a novel structural and
functional analogue of MCP-3 and cotaxin.";

EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 97113354.

GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N.,
LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;
"Human monocyte chemoattractant protein (MCP)-4 is a novel CC
chemokine with activities on monocytes, eosinophils, and basophils
induced in allergic and nonallergic inflammation that signals through
J., IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
BY SIMILARITY.
L -> M (IN REF. 2).
B5637084 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 75; DB 1; Le
Pred. No. 2.94e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
CYTOKINE; CHEMOTAXIS; SIGNAL.
SIGNAL.
BY SIMILARITA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5-JUL-1998 (REL. 36, CREATED)
                                                   SEQUENCE OF 14-90 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9969 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         larity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; L34553; G509596; -
GENE 160:305-306(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA13 OR MCP4 OR NCC1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70 EVCANPENDWVQ 81
                                                                                                                                                           -1- SUBUNIT: HOMODI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LT 11
MCP4_HUMAN
Q99616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-HEART
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
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99 AA

1 QVCADPSEEWVQ 12

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PTW: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FURDGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE. (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                      POWER C.A., MEYER A., RISON S.C.G., GUYE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
SUBMITTED (CERNOTOCTIC FACTOR THAT ATTRACTE NONOCYTES, LYMPHOCYTES,
BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CORRAB AND CCRS RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUROCYTES AT BOTH SIDES OF ALLERGIT AND NONALLEGREET CINFLAMMATION.
MAI BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARPERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCIEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MASS SPECTROMETRY: MW-9314; MW_ERR=30; METHOD=MALDI; RANGE=17-98.
MASS SPECTROMETRY: MW-8760; MW_ERR=30; METHOD=MALDI; RANGE=22-98.
MASS SPECTROMETRY: MW-875; MW_ERR=30; METHOD=MALDI; RANGE=24-98.
INDUCTION: BY INTERLEUKIN-1 AND INP-ALPHA.
TISSUE SPECIFICITY: WIDEX: EXPRESSED. FOUND IN SMALL INTESTINE,
THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                  MEDLINE: 97341179.
MEDLINE: 97341179.
MEDLINE: 97341179.
MEDLINE: 97341179.
MEDLINE: APRELED H.M., MOORES K., WHITE J.R., ELSHOURBACY N., APPELIBAUM E., RADRE T.J., BRAWNER J., POLEY J.J.
APPELIBAUM E., IMBURGIA C., MACNULLY D., MATTHEWS J., O'DONNELL K., O'SHANNESY D., SCOTT M., GROOT P.H.E., MACPHEE C., TO SCOTT M., GROOT P.H.E., MACPHEE C., CALCINIG, In vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 2.94e-04;
2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 98;
                                                                                                                                                                                                                                                                                      SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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  SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
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                                                                                                                                                                                           receptor 2B.";
J. BIOL. CHEM. 272:16404-16413(1997).
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98
24
74
74
29
10986 MW;
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X98306; E248571; -.
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8; Conservative

Matches

72 EICADPKEKWVQ 83

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-!- PTM: O-GLYCOSYLATED.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VAN DAMME J., PROOST P., LENAERTS J.-P., OPDENAKKER G.; "Structural and functional identification of two human, tumor-derived monocyte chemotactic proteins (MCP-2 and MCP-3) belonging to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEMISTRY 36:4412-4422(1997).
BIOCHEMISTRY 36:4412-4422(1997).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND
-!- FOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.; "Determination of the three-dimensional structure of CC chemokine monocyte chemoattractant protein 3 by 1H two-dimensional NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MINITY A., CHALON P., GUILLEMOT J.C., KAGHAD M., LIAUZUN P.,
MAGAZIN M., MILOUX B., MINTY C., RAMOND P., VITA N., LUPKER J.,
SHIRE D., FERRARA P., CAPUT D.;
"Molecular cloning of the MCP-3 chemokine gene and regulation of its
                                                                                                                                                                                                                                                                                                                                                                  OPDENAKKER G., FITEN P., NYS G., FROYEN G., VAN ROY N., SPELEMAN F., LAURENS G., VAN DAWME J.;
"The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                          OPDENAKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; OPDENAKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; Human monocyte chemotactic protein-3 (MCP-3): molecular cloning of the cDNA and comparison with other chemokines."; BIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.; "Structural characterization of a monomeric chemokine: monocyte chemoattractant protein-3.";
                                                                                                                                                  EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; 'MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                             01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE
                                                                                                                                                                                                        SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                    CHEMOATTRACTANT PROTEIN 3) (NC28).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chemoattractant protein-3."; FEBS LETT. 395:277-282(1996).
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                                01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQI
15-JUL-1998 (REL. 36, LAST ANNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chemokine family.";
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-C) (CHEMOKINE CC).
 STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-OSTEOSARCOMA;
MEDLINE; 92308855.
                                                                                                                                            HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 93305913.
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MCP3_HUMAN
P80098;
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KODELJA V., MUELLER C., POLITZ O., HAKIY N., ORFANOS C.E., GOERDT S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE SCYAIS OR MIP4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MIURA R., OPDEMNKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.,
"A novel human oc chemokine Parc that is most homologous to
macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic
for T lymphocytes, but not for monocytes.";
IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
EUKARYOTA; METAGOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                  PFAM; PF00048; 118; 1. CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                               MONOCYTE CHEMOTACTIC PROTEIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 75; DB 1; Lengt... red. No. 2.94e-04;
                                                                                                                                                                                                                                                                                                                                              PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                    (IN REF. 4)
                                                                                                                                                                                                                                                                                                                                                                                                     T -> K (IN REF. 4).
MISSING (IN REF. 4)
                                                                                                                                                                                                                                                                                                                                                                                                                              7502E19C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LI H., RUBEN S.; "Macrophage inflammatory protein-3 and -4."; PATENT NUMBER US5504003, 02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                        PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUE=AORTA, AND LUNG;
MEDLINE; 97376836.
                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL
                                                                                                                                                                                                                                                                                                INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                              X72309; -; NOT_ANNOTATED_CDS.
X71087; G288399; -.
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                                                                                                                                                       X71087; G288398; ALT_INIT.
X71087; G288397; ALT_INIT.
                                                                                                               EMBL; X72308; G313708; ALT_INIT
                                                                                                                                                                                                                                                                                                                                                                                                                           11200 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                               PIR; S32222; S32222.
PIR; A54678; A54678.
PDB; INCV; 15-OCT-97.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           99 AA;
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                                                                                                                                                                                                                                          MIM; 158106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MIP4_HUMAN
P55774;
                                                                                                                                                                                                                                                                                                                                       MOD_RES
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                        PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                          EMBL;
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                                                                                                                                             EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        WELLS T.N.C., PEITSCH M.C.;
"The chemokine information source: identification and characterization of novel chemokines using the Worldwideweb and expressed sequence tag databases.";
J. LEUKOC. BIOL. 61:545-550(1997).
I. FUNCTION: CHEMOTACTIC FATOR THAT ATTRACTS LYMPHOCYTES BUT NOT NOVELY CHEMOTOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES: IN LYMPH NODES.
INTO B CELL FOLLICLES IN LYMPH NODES.
ITSSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THE LUNG. A LOWER LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODES,
                                                                                                                                                                                                                             THYMUS AND APPENDIX.
-1- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHERRY B., TEKAMP-OLSON P., GALLEGOS C., BAUER D., DAVATELIS G., WOLDE S.D., MASTARZ F., COIT D., CERAMI A.;
Wesolution of the two components of macrophage inflammatory protein macrophage inflammatory protein macrophage inflammatory protein 1 beta.";

EXP. MED. 168:2251-2259(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MACROPHAGE INFLAMMATORY PROTEIN 4.
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 74; DB 1; Length. Core 74. DB 1; Length. Core No. 4.88e-04;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 89093958.
BROWN K.D., ZURAWSKI S.M., MOSMANN T.R., ZURAWSKI G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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BY SIMILARITY.
052AA3DC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Y13710; E321838; -. PSOSITE; PSOSITE; PSOSOTE; PSOSOTE; PSOSOTE; PSOSOTE; PSOSOTE; PSOSOTE; PSSP; P13236; 1HUN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AB000221; D1022520; -.
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SCYA4 OR MIP1B.
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                                                                                                                                                                                                                                                                               C-C) (CHEMOKINE CC).
                                  DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (REL. 33,
(REL. 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68 QICADPNKKWVQ 79
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P14097;
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SEQUENCE
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SEQUENCE FROM N.A.
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                                                                                                                                                   SUBMITTED (OCT-1991) TO EMBL/GENBANK/DDBJ DATA BANKS.
-i- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-i- SUBUNIT: HOMODIMER (BY SIMILARITY).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCHULZ-KNAPPE P., MAEGERT H.-J., DEWALD B., MEYER M., CETIN Y., KUBBIES M., TOMECZKOWSKI J., KIRCHHOFF K., RAIDA M., ADERMANN K., KIST A., REINECKE M., SILLARD R., PARDIGOL A., UGUCCIONI M., BAGGIOLLIN M., FORSSMANN W.-G.;

"HCC-1, a novel chemokine from human plasma.";

J. EXP. MED. 183:295-299(1996).
"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. IMMUNOL. 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                         SPRAIN-DBA/20; TISSUE-LIVER;
DAUBERSIES P., LEPRETRE F., BAILLEUL B., GROVE M., PRAGNELL I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A -> P (IN REF. 1).
E -> Q (IN REF. 1).
D -> H (IN REF. 1).
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01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
CHEMOKINE CC-1 PRECURSOR (HCC-1) (NCC-2).
SCYA14 OR NCC2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C543B91F CRC32;
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BY SIMILARITY.
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TISSUE=BONE MARROW;
MEDLINE; 96136773.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 73;
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Local Similarity 72.7%;
nes 8; Conservative
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Q16627;
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EMBL; M35590; G199697; -.
                                                                                                                                                                                                                                                                                                                                                                                           EMBL, X62502; G53127; -. PIR; C30552; C30552. PIR; JL0088; JL0088.
                                                                                                                                                                                                                   C-C) (CHEMOKINE CC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72 QICANPSEPWV 82
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                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                PLUMB M.A.;
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                                                                                                                                                         PARTICLE AND MARGERT H.-J., CIESLAK A., HILL O., SCHULZ-KNAPPE P.,
ROKSSKANN W.-G.;
SUBMITTED (OCT-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.

L. FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
RECEPTORS THAT ALSO RECOGNIZE MIP. ALPHA. IT INDUCED
RECEPTORS THAT ALSO RECOGNIZE MIP. ALPHA. IT INDUCED
RECEPTORS THAT ALSO RECOGNIZE MIP. ALPHA. IT INDUCED
RECEPTORS THAT ALSO RECOGNIZE MIP. AND MAS INACTIVE ON T
AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T
C. TRENDES. NEUTROPPHILS, AND BOSINOPHIL LEUKOCYTES. ENHANCES THE
ROLLFERATION OF CD34 MYELOID PROGRNITOR CELLS.
C. TISSUES SPELETITITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
TISSUES: SPLEEN, LIYER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
TISSUES: SPLEEN, LIYER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
C. MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
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        PARDIGOL A., MAEGERT H.-J., ZUCHT H.D., FORSSMANN W.-G., SCHOLZ-KNAPPE P.;
                                                         SUBMITTED (MAY-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
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pred. No. 8.08e-04;
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A3E7BCAD CRC32;
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EMBL; Z49269; G1004267; --
PMM; 601392; --
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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7; Conservative
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                                                                                                                               SEQUENCE FROM N.A.
IISSUE-LIVER;
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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:21:13 2000; MasPar time 3.56 Seconds 134.882 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-42 (1-12) from US09150813.pep 93 Title:

1 QVCADPSEEWVQ 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

122810 segs, 40068593 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 24.749; Variance 37.567; scale 0.659

Statistics:

Database:

pir60 1:pir1 2:pir2 3:pir3 4:pir4

SUMMARIES

Pred. No.	2.99e-07	. 99e-07	32e-06	9.32e-06	3.95e-05	5.64e-04	1.22e-04	5.72e-04	5.72e-04	5.72e-04	1.70e-03	4.24e-03	4 240-03	000000	6.6/e-U3	1.05e-02	1.05e-02	1.05e-02	1.64e-02	1 640-02		1.04e-02	1.64e-02	1.64e-02	2.56e-02
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DI DI	A30574	B35673	C60407	A31767	146730	JE0177	152322	148147	A30209	507723	2000	0.0400	(30332	JC2417	A60299	A46539	A32393	TC2136	10001	THOONE	542496	I46997	A44253	A53096	JC5295
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ALIGNMENTS

A30574 #type complete macrophage inflammatory protein 1-alpha precursor - human macrophage inflammatory protein; lpyphocyte tumor promoter induced protein; macrophage inflammatory protein promoter induced protein; macrophage inflammatory protein phomolog GOS19-1; MIP-lalpha; pAT464; small inducible cytokine A3: T-cell activation protein 1	#formal_name Homo sapiens #common_name man 03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change 29-May-1998	ESSIONS A35673; A30574; A30412; A44198; A30500 ERBNCE A35673 A30573 A305	1 44	U. #journal J. Immunol. (1989) 142:1582-1590 #title Mitogenic activation of human T cells induces two closely #title related genes which share structural similarities with a new family of secreted factors. #cross-references MID:89140347 #acression A30574	1 44 5 2 2 2	A2419 Obaru J. Bi A cDN
RESULT 1 ENTRY TITLE ALTERNATE_NAMES	ORGANISM DATE	ACCESSIONS REFERENCE #authors #journal #title #cross-references	##molecule, ##molecule, ##residues ##cross-re REFERENCE #authors	#journal #title #cross-refer #accession	##molecule ##residues ##residues ##residues ##residues # ##residues ##molecule ##molecule ##molecule ##molecule ##molecule ##molecule	REFERENCE #authors #journal #title

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Mol. Cell. Biol. (1990) 10:3646-3658
Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Siebenlist, U.; Kelly, K.
C.C.; Burd, P.R.; Siebenlist, U.; Kelly, K.

#title Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ##cross_references EMBL:X52149; NID:g34750; PID:g296666

This protein is a member of a "small inducible" or "activation specific" gene family, is likely to be an early acting interleukin, and is the product of a putative G0/G1 switch gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #authors Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
#journal DNA Cell Biol. (1990) 9:589-602
#title Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preliminary; not compared with conceptual translation
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NCE A30412
                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
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28 Sep-1990 #sequence_revision 28-Sep-1990 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             macrophage inflammatory protein homolog GOS19-2; small inducible cytokine A4
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##residues 1-93 ##label BLU
##cross-references GB:M24110; GB:M32338; NID:9182848; PID:9182849
                                                                                                                  #gene GDB:SCYA3
##cross-references GDB:120368; OMIM:182283
#map_position 1/q11-1/q21
CLASSIFICATION #superfamily macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                        Score 93; DB 2; Length 92;
Pred. No. 2.99e-07;
0; Mismatches 0; Indels
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LD78-beta protein precursor - human
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                                                                                 1-92 ##label OBA
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#cross-references MUID:86223879
                                           ##status preliminary
##molecule_type mRNA
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Local Similarity 100.0%;
les 12; Conservative
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##residues 1-93
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#domain signal sequence #status predicted #label SIG\
#product LD78-beta protein #status predicted #label MAT
#length 93 #molecular-weight 10161 #checksum 7784
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 monocyte adherence-induced protein 5 beta - human (fragment)
#formal_name Homo sapiens #common_name man
06-Nov-1992 #sequence_revision 06-Nov-1992 #text_change
03-May-1996
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Martin, G.; Ladner, M.; Haskill, S.
J. Immunol. (1990) 144.4434-4441
Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and
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McChiche, S.; Viegas-Pequignot, E.; Hercend, T.; Triebel,
                                                                                                                                                                                                                                                                                      0; Gaps
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07-Jun-1990 #sequence_revision 29-May-1998 #text_change
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                                                                                                                                                                                                                                Score 93; DB 2; Length 93;
Pred. No. 2.99e-07;
0; Mismatches 0; Indels
                                                                             #superfamily macrophage inflammatory protein
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#length 50 #checksum 9927
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Pred. No. 9.32e-06;
0; Mismatches 1; Indels
#gene GDB:SCYA4 ##cross_references GDB:120369; OMIM:182284 #map_position 17q11-17q21 #introns 26/1; 64/2
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#cross-references MUID:90257367
#accession C60407
                                                                                                                                                                                                                              Match 100.0%;
Local Similarity 100.0%;
les 12; Conservative
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Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                        cytokine
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A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eur. J. Immunol. (1989) 19:1045-1051
Eur. J. Immunol. (1989) 19:1045-1051
Isolation and characterization of a cDNA encoding a putative
cytokine which is induced by stimulation via the CD2
structure on human T lymphocytes.
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J. Immunol. (1989) 142:1582-1590
Mitogenic activation of human T cells induces two closely
related genes which share structural similarities with a
new family of secreted factors.
                               ##cross-references GB:X53682; NID:g34217; PID:g34218
##experimental_source natural killer cell, strain CD3-CD2+, F5, 5IIIE5
NCE A40978
                                                                                                                                                                                                                                                                                                                                                                             Seuanez, H.N.; Leonard, W.J.
J. Blol. Chem. (1991) 266:17531-17536
The gene encoding the Act-2 cytokine. Genomic structure,
HTLV-1/tax responsiveness of 5' upstream sequences, and
                                                                                                       Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.;
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A novel polypeptide secreted by activated human T
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##cross-references GB:M23502; NID:9533212; PID:9533213
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##residues 1-19,'L',21-92 ##label ZIP
##cross-references GB:M25316; NID:9602454; PID:9602455
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chang, H.C.; Reinherz, E.L.
                                                                                                                                                                                                            chromosomal localization. #cross-references MUID:91373378
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##molecule_type mRNA
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#accession D30552
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lymphocyte and monocyte chemoattractant CC chemokine - human #formal_name Homo sapiens #common_name man 10-11-1998 #sequence_revision 10-Jul-1998 #text_change JF-Mar-1999
                                                        ts annotation; conformation and disulfide bond assignments by (1)H-NMR, residues 24-92
This protein is secreted by activated lymphocytes and monocytes. It is bound by chemokine (C-C) receptor 5 (see PIR:A43113) and receptor 1 (see PIR:A45177).
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#title Dynamic changes in mRNA expression of neutrophils during the course of acute inflammation in rabbits.
#cross_references MUID:94198229
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#product macrophage inflammatory protein 1-beta #status
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#authors Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M. #submission submitted to the Brookhaven Protein Data Bank, January 1994 #cross-references PDB:1HUM
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Yoshinaga, M.
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immune activation gene 2 - rabbit
#formal_name Oryctolagus cuniculus #common_name domestic
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1; Mismatches 1; Indels
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Pred. No. 9.32e-06;
0; Mismatches 1; Indels
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Best Local Similarity 83.3%;
Matches 10; Conservative
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Local Similarity 91.7%;
Les 11; Conservative
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#introns 26/1; 64/2
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#cross-references MUID:90174947
                                 Query Match
Best Local Similarity 66.7%;
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#journal Biochem. Biophys. Res. Commun. (1998) 247:217-222
#title Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with myelosuppressive activity.
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J. Immunol. (1993) 150:5025-5032
cDNA cloning of guinea pig monocyte chemoattractant protein-1
and expression of the recombinant protein.
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
02-Jul-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
                                                                                                                                    #length 120 ##label YOU #checksum 230
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FICATION #superfamily macrophage inflammatory protein
I #length 92 #molecular-weight 10335 #checksum 3184
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Pred. No. 2.64e-04;
6; Mismatches 0; Indels
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1; Mismatches 2
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larity 50.0%;
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J. Biol. Chem. (1989) 264:679-682
Platelet-derived growth factor-inducible gene JE is a member
of a family of small inducible genes related to platelet
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Nucleic Acids Res. (1990) 18:23-34
Analysis of the rat JE gene promoter identifies an AP-1
binding site essential for basal expression but not for TPA
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                                                                                  Gaps
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                                                                                                                                                                                                                                                                       A30209 #type complete
PDGF-inducible JE glycoprotein precursor - mouse
#formal_name Mus musculus #common_name house mouse
01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                            #authors Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
#journal Proc. Natl. Acad. Sci. U.S.A. (1988) 85:3738-3742

#title Cloning and expression of JE, a gene inducible by platelet-derived growth factor and whose product has cytokine-like properties.
#cross-references MUID:88234501
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29 Jan-1993 #sequence_revision 29-Jan-1993 #text_change
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Score 77; DB 2,
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Pred. No. 6.72e-04;
1; Mismatches 2; Indels
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##molecule_type DNA; mRNA
##residues
##cross-references GB:J04467; NID:g193488; PID:g387169
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#accession A44771
                                                                       8; Conservative
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Best Local Similarity 75.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408
The human MCP-3 gane (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme,
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Human monocyte chemotactic protein-3 (MCP-3): Molecular
cloning of the CDNA and comparison with other chemokines.
                                                                                                                                                                                                                                                                                     ##cross-references GB:M57441; NID:g205333; PID:g205334
##experimental_source spleen cells
##note the authors translated the codon GAA for residue 62 as
##note Lys and GCT for residue 63 as Leu
                                                                                                       Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem. Biophys. Res. Commun. (1991) 174:504-509
Molecular cloning of rat monocyte chemoattractant protein-1
(MCP-1) and its expression in rat spleen cells and tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                  #domain signal sequence #status predicted #label SIG\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #product immediate early serum-responsive protein JE
#status predicted #label MAT
#length 148 #molecular-weight 16460 #checksum 4876
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                                                                   ##cross-references EMBL:X17053; NID:g55530; PID:g55531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 77; DB 2; Le
Pred. No. 6.72e-04;
3; Mismatches 1;
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#cross-references MUID:94375065
                                                                                                                                                                                                cell lines.
#cross-references MUID:91128376
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ilarity 66.7%;
Conservative
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                                        ##molecule_type DNA
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#title
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#journal J. Exp. Med. (1988) 168:2251-2259
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
#cross-references MUID:89067830
#accession JL0088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
#journal J. Immunol. (1989) 142:679-687
#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
#cross-references MUID:89093958
#accession C30552
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Davatelis, G.; Wolpe, S.D.; Masiarz, F.; Colt, D.; Cerami,
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                                                                                                                                                                                                                                                                                                                                                              #domain signal sequence #status predicted #label SIG\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          c30552 #type complete
macrophage inflammatory protein 1-beta precursor - mouse
H400; SIS gamma: T-cell activation protein gamma
#formal_name Mus musculus #common_name house mouse
28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change
                                                                                                                                                                                                                                                                                                                                                                                             #product monocyte chemotactic protein 3 *status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) *status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                             ##cross_references EMBL:X71087; NID:9288396; PID:9288397
T This protein induces proteinase secretion and chemotaxis by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        predicted
#length 109 #molecular-weight 12356 #checksum 1535
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##residues 1-92 ##label SHE
##cross-references GB:M35590; NID:g199696; PID:g199697
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                                                                                                                                                                                                                                                                               #superfamily macrophage inflammatory protein cytokine; glycoprotein; inflammation
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##residues 24-33,'XX',36,'X',38 ##label SH2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80.6%; Score 75; DB 2; Le
58.3%; Pred. No. 1.70e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Mismatches
                                                                                                                                                                                             ##cross-references GDB:138473; OMIM:158106
#map_position 17q11-17q12
#introns 36/1; 75/2
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                                                                                                                                                                          GDB:SCYA7; SCYA6; MCP-3
                                 1-109 ##label MIN
                                                                                                                      macrophages and monocytes.
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##molecule_type mRNA
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1 QVCADPSEEWVQ 12
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#domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
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monocyte chemoattractant protein-2 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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Scheit, K.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractar protein 1 precursor - human GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1; monocyte chemotactic factor 1; monocyte secretory protein; tumor-derived chemotactic factor 2 (GDCF-2) #formal_name Homo sapiens #common_name man 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change
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Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
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#product monocyte chemoattractant protein-2 #status
predicted #label MAT
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A35474; A33476; S03339; I51841; A60299; A32300; A32396;
A34561; I57488; JC1096
                                                                                                                                                                                                                                                                                                          #length 92 #molecular-weight 10168 #checksum 7516
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                                                                                                                                                                                                                                                                                                                                                      Score 73; DB 2; Length 92;
Pred. No. 4.24e-03;
2; Mismatches 1; Indels
                                                                                                                                         #superfamily macrophage inflammatory protein
                                                        ##cross-references EMBL.X62502; NID:953126; PID:953127
T This protein is a monokine.
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                                         1-92 ##label DAU
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  preliminary
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#accession JC2417
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Local Similarity 72.7%;
les 8; Conservative
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                                                                                                                                                                   glycoprotein
                     ##molecule_type_DNA
##residues 1-9
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| QVCADPSEEWV 11
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##status
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Follins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a monocyte secretory
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                    Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
Biochem. Biophys. Res. Commun. (1990) 169:346-351
Structure of human monocyte chemotactic protein gene and its
regulation by TPA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and
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#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cocession 151841
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##experimental_source glioma cell line U-105MG
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FEBS Lett. (1989) 244:487-493
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#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.
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#product monocyte chemoattractant protein 1, short form
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#formal_name Mus musculus #common_name house mouse
18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change
22-Jan-1999
Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1850-1854
Complete amino acid sequence of a human monocyte
Chemoattractant, a putative mediator of cellular immune
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CLASSIFICATION #superfamily macrophage inflammatory protein

KEYWORDS

Cytokine; glycoprotein; inflammation; pyroglutamic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
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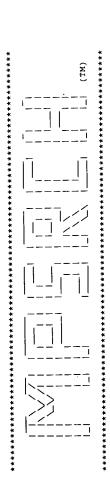
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Neilson, E.G.; Krensky, A.
Kidney Int. (1992) 41:220-225
Isolation and characterization of cDNA from renal tubular
epithelium encoding murine Rantes: A small intercrine from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #authors Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.
#journal Mol. Cell. Biol. (1994) 14:2914-2925
#title Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of MuRantes and crg-2.
#cross_references_MUID:94217689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26/1; 63/2 **superfamily macrophage inflammatory protein chemotaxis; cytokine; immediate-early protein; inflammation
                                       #authors Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.; Nellson, E.G. 1994) 152:1182-1189
#journal J. Immunol. (1994) 152:1182-1189
#title Cloning, genomic organization, and chromosomal localization of the SoyaS gene encoding the murine chemokine RANTES.
#cross-references.MID:94132613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #domain signal sequence #status predicted #label SIG/
                                                                                                                                                                                                                                                                                                                                                            Schall, T.J.; Simpson, N.J.; Mak, J.Y.

Eur. J. Immunol. (1992) 22:1477-1481

Molecular cloning and expression of the murine RANTES

Cytokine: structural and functional conservation between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              translation not shown; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##residues ##residues ### 1-40,'E',42-91 ##label NEI ##cross-references GB:M77747; NID:9200649; PID:9200650 ##cross-references GB:M77747; NID:9200649; PID:9200650 in This chemoattractant for monocytes but not neutrophils is an immediate-early response protein to LPS stimulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #product monocyte chemoattractant cytokine RANTES
#status predicted #label MAT
#th 91 #molecular-weight 10071 #checksum 3010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                               oreliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ##cross_references EMBL:X70675; NID:g475205; PID:g475206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                     ##residues 1.91 ##label DAN
##cross-references EMBL:U02298; NID:g460090; PID:g460091
VCE A46539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 76.3%; Score 71; DB 1; Lv Best Local Similarity 66.7%; Pred: No. 1.05e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        translated from GB/EMBL/DDBJ
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148875; A46539; I48654; I56970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the Scy superfamily.
#cross-references MUID:92277990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##status
##molecule_type DNA
##molecule_type I-91 ##label SHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mouse and man.
#cross-references MUID:92289805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ##molecule_type mRNA
##residues 1-40,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71 QVCANPEKKWVQ 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ##molecule_type mRNA
                                                                                                                                                                                                                                                                         ##molecule_type DNA
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                              148875
                                                                                                                                                                                                                    I48875
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Job time : 31 secs.



Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:20:38 2000; MasPar time 3.60 Seconds 70.794 Million cell updates/sec Run on:

rabular output not generated.

(1-12) from US09150813.pep 93 >US-09-150-813-42 Description:

1 QVCADPSEEWVQ 12 Perfect Score: Sequence: 170751 seqs, 21266608 residues Searched:

PAM 150 Gap 15

Scoring table:

Post-processing: Minimum Match 0% Listing first 45 summaries

a-geneseq35 Database:

39:part39

Mean 18.220; Variance 70.223; scale 0.259 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred No		.88e-02	5.88e-02	5.88e-02	5.88e-02	5.88e-02	5.88e-02	5.88e-02	88e-02	88e-02	88e-02	88e-02	88e-02	88e-02	88e-02	88e-02	88e-02
77		υ. ω.	ω. ω.	ω.	ω.	ď.	'n.	υ 	N.		 	'n.	'n	ω.	ľ.	٠	
		Ser.							Ile24		Asp64						
Description	TOTO AT	LD78 Pro7>Ser	LD78.	Lys60>Ser.	Asp64>Ser.	Phe28>Glu.	Phe28>Ala.	Asp26>Ala.	Phe23>Asn,	Arg17>Ser.		Arg47>Glu.	Phel2>Ala.	Phe28>Ser.	Glu29>Arg.	_	Arg47>Ser.
200	7000	N1-6	N1 - 3	LD78	LD78	LD78	LD78	LD78	LD78	LD78	LD78						
£	10	R38974	R38948	R38982	R38983	R38938	R38955	R38932	R38931	R38930	R38937	R38936	R38954	R38929	R38943	R38944	R38958
5	97	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4	Match Length DB	63	99	69	69	69	69	69	69	69	69	69	69	69	69	69	69
Query	Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Score	93	6.6	. 6	600	66	66	93	66	66	63	93	66	93	93	93	93
Result	. ON	-	, 0	a m	4	· LC	ı ve	,	- 00	0	10	11	12	13	14	15	16

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Gaps

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42 qvcadpseewvg 53

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		Arg47	Arg45		G1n18									G1u29				Glu29	LD78.		-Serl>Pro	rl>Pro	, (Gln,	protein.	cell inh	protein.	hibitor,	
Ile24>Asn.	Glu29>Ser.	\sim	Lys44>Glu,	Ala9>Ser.	Arg17>Ser,	Asp5>Arg.	Gln18>Ser.	Phe23>Ala.	Arg45>Ser.	Lys44>Ser.	Leu65>Ala	Glu66>Ser	Lys36>Ser	Asp26>Ala,	Ala3>Glu.	Ala3>Ser.	Leu2>Ala.	Asp26>Ala,		Ser-Ala-LD78.	Ser-Ala-Se	Leu-Ser-Ala-Ser1>Pro	LD78 Arg17>Glu,	MIIA	ste	MI10 p	C	l-alpha.
LD78	LD78	LD78	LD78	LD78	8	ന	ന		œ	m	ന	LD78	æ		LD78	LD78	LD78	8	Ala-S	Ser-P	Ten-S	ren-5	LD78	Human	Varient	Human	Stem	MIP-]
R38939	95	R38941	392	3	394	3	\sim	20	m	m	R39085	α	8	8	R38965	R38971	R38970	R39082	R38949	R38946	R38950	m	396	8272	261	272	62	79
7	_	7	7	7	^	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	39	12	39	12	13
69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	7.0	71	72	72	72	92	92	63	93	93
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17	à	5 6	20	25	22	2.0	24		2 0	27	28	56	30	3.1	3.5		3.4	3.0	9 %	3.7	. œ	0 6	0 4	4.7	4.2	43	44	4.5

ALIGNMENTS

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Example 49; Page 68; 294pp; English.

Example 49; Page 68; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
Analogues of natural stem cell inhibitors, such as LD78 and tion

beyond certain stages (e.g. dodecamer), have improved solution

beyond certain stages (e.g. dodecamer), have improved solution

trility as stem cell protective agents. The analogues may be used

in tumour therapy, psoriasis or other diseases involving hyper-

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Argl7>Glu (with

Glu18>Glu10

Sequence 63 As;
                                                                                                                                                                                                                                                                                                                              Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                             SCI; star cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 93; DB 7; Length 63;
Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                      14-CCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
           R38974 standard; Protein; 63 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.0%;
Matches 12; Conservation
                                                   23-NOV-1993 (first entry)
                                                                                                                                                                                 08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
                                                                                                                                                                                                                                                                                                                      WPI; 93-227322/28.
                                                                       N1-6 LD78 Pro7>Ser
                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                Hunter MG;
                                                                                                                                                                                                                                                                              Craig S,
                                   R38974;
RESULT
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1 OVCADPSEEWVQ 12

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Example 23; Page 58; 294pp; English.

Anadogues of natural stem cell inhibitors, such as LD78 and MIP-labba, having mutations to prevent or reduce multimer formation properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used proliferative stem cells.

Proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Gln (with analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, providing better tissue penetration by a petter tissue penetration. Example 57; pep 70-71; 294pp; English. Analogues of natural stem cell inhibitors, such as LD78 and MIP-1alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used
                                                                                                                                                                                                                                                                                             Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
                                                                             SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 93; DB 7; Length 66; Pred. No. 5.88e-02; 0; Mismatches 0; Indels
                                                                                                                                                                        23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-CCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JUL.1992.
23-DEC-1991; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
JT 2
R38948 standard; Protein; 66 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R38982 standard; Protein; 69 AA.
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                                           23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45 qvcadpseewvq 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 QVCADPSEEWVQ 12
                                                                                                                                                                                                                                                                                 93-227322/28.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LD78 Lys60>Ser.
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WO9313206-A.
                                                               N1-3 LD78.
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Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha unable to form stable multimer higher than dodecamer, providing better tissue penetration. Example 58; Page 71; 294p; English.

Example 58; Page 71; 294p; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution. Composities leading to enhanced productivity and greater therapeutic utility as stem cells. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyperic to the profit in the cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg1>Cln (with canalogues correspond to the pref. LD78 analogues.
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                                                                                                                                                       Gaps
               proliferative stem cells.
Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Argl7>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
 in tumour therapy, psoriasis or other diseases involving hyper-
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                                                                                                                                                                                                                                                                                                                          LD78 Asp64>Ser.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LD78 Phe28>Clu. SCI; Stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psorlasis; hyperproliferation.
                                                                                                                   Score 93; DB 7; Length 69;
Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 93; DB 7; Length 69;
Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                            R38983 standard; Protein; 69 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T 5
R38938 standard; Protein; 69 AA.
                                                                                                                 / Match 100.0%;
Local Similarity 100.0%;
les 12; Conservative
                                                                                                                                                                                                                                                                                                           23-NOV-1993 (first entry)
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Best Local Similarity 100.0%;
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23-DEC-1992, G02390,
23-DEC-1991, GB-027319,
14-OCT-1992, GB-021587,
                                                                                                                                                                               48 gvcadpseewvg 59
                                                                                                                                                                                                            1 OVCADPSEEWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 93-227322/28.
                                                                                69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                  Sequence
                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                               R38983;
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R38932 standard; Protein; 69 AA
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      A PARAMENTAL PROPERTY OF THE P
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alpha, having mutations to prevent or reduce multimer formation

alpha, having mutations to prevent or reduce multimer formation

beyond certain stages (e.g. dodecamer), have improved solution

properties leading to enhanced productivity and greater therapeutic

properties leading to enhanced productivity and greater therapeutic

utility as stem cells.

proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg1>Glu (with

Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha

analogues correspond to the pref. LD78 analogues.
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                                                                                                                  protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, alpha - unable to form stable multimer higher than dodecamer, providing better tissue penetration providing better tissue penetration.

Example 13: Page 54: 294pp: English.

Example 13: Page 54: 294pp: English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution beyond certain stages (e.g. dodecamer), have improved solution to properties leading to enhanced productivity and greater therapeutic utility as stem cells.

In tumour therapy, psoriasis or other diseases involving hyperint therapy stem cells.

Most pref. LD78 analogues are Phel2>Gln, Ly844>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
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SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
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Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 93; DB 7; Length 69;
Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Edwards RM, Gilbert RJ;
                  (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R38955 standard; Protein; 69 AA.
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Best Local Similarity 100.0%;
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Local Similarity 100.0%;
es 12; Conserred
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                                                                                                               WPI; 93-227322/28.
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WO9313206-A.
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                                                                                    Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craig S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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RESULT

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protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, alpha - unable to form stable multimer higher than dodecamer, browiding better tissue penetration as Emaple 6; Page 52; 294pp; English.

Sample 6; Page 52; 294pp; English.

Calpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution corrain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic trility as stem cell protective agents. The analogues may be used utility as stem cells.

Cutility as stem cells.

proliferative stem cells.

proliferative stem cells.

Ginl8>Glub and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            providing better tissue penetration Example 7; Page 52; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used un tumour therapy, psoriasis or other diseases involving hyperproliferative stem cells.

Proliferative stem cells.

proliferative stem cells.

Glil85Glu, and, esp., Asp65Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 93-227322/28. Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
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SCI; Stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                      LD78 Asp26>Ala.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 100.0%; Score 93; DB 7; Length 69; Best Local Similarity 100.0%; Pred. No. 5.88e-02; Best Local Similarity 100.0%; O: Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BLO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards Pl
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R38931 standard; Protein; 69 AA.
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23-NOV-1993 (first entry)
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23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
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23-DEC-1992; G02390.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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Protein with stem cell inhibition activity, e.g. LD78 or MIP-1
alpha - unable to form stable multimer higher than dodecamer,
T providing better tissue penetration
Example 5: Page 51; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
C lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
c beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
in tumour therapy, psoriasis or other diseases involving hyper-
in tumour therapy, psoriasis or other diseases involving hyper-
C in tumour therapy, psoriasis or other diseases involving hyper-
C in tumour cells.
Most pref. LD78 analogues are Phel2>Gln, Ly844>Ser, Arg17>Glu (with
c analogues correspond to the pref. LD78 analogues.
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SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                    Score 93; DB 7; Length 69;
Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LD78 Lys60coln, Asp64>Asn.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 93; DB 7; Length 69;
Pred. No. 5.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-1991; GB-07319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gilbert RJ;
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23-DEC-1991; GB-027319.
24-DCT-1992; GB-021519.
(BRBI-) BRITISH BIO-TECHNOLOGY LID.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                R38930 standard; Protein; 69 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R38937 standard; Protein; 69 AA.
                                                    Match 100.0%;
Local Similarity 100.0%;
les 12; Conservative
                                                                                                                                                                                                                                               23-NOV-1993 (first entry)
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Best Local Similarity 100.0%;
datches 12; Conservative
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                      69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 93-227322/28.
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WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69 AA;
                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
WO9313206-A.
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                      Sednence
                                                    Query Match
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                                                                                   Matches
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0
                            Example 12; Page 54; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
hardous of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
proliferative stem cells.
                                                                                                                                                                                  Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           providing better tissue penetration.

Example 11; Page 53; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
halpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
proliferative stem cells.

Most pref. LD78 analogues are Phel2>cln, Lys44>ser, Arg17>clu (with
analogues correspond to the pref. LD78 analogues.
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Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
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Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LD78 Arg475Glu.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                        100.0%; Score 93; DB 7; Length 69; 100.0%; Pred. No. 5.88e-02; rvative 0; Mismatches 0; Indels
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Pred. No. 5.88e-02;
0; Mismatches 0; Indels
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7 23-DEC-1992; GC2390.
R 23-DEC-1991; GB-027319.
2R 14-0CT-1992; GB-027319.
PA (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Aniq S, Czaplewski LG, Edwards RM, Gilbert RJ;
Aniq S, Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                             R38936 standard; Protein; 69 AA.
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Local Similarity 100.0%;
les 12; Conservative
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LD78 Phel2>Ala.
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WO9313206-A.
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Example 29; Page 60; 294pp; English.

Canalogues of natural stem cell inhibitors, such as LD78 and MIP-

Ialpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution beyond certain stages (e.g. dodecamer), have improved solution to properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper.

Considerative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg1>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha

Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              providing better tissue penetration
Example 4; Page 51; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
Proliferative stem cells.
Global and, esp., Asplésha and Glu66>Ser. Pref. MIP-lalpha
analogues correspond to the pref. LD78 analogues.
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SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
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SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
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23-DEC-1991; GB-027319.
14-CCT-1992; GB-021587.
(BRBI-) BRITISH BLO-TECHNOLOGY LTD.
CTALG S, CZADIEWSKI LG, EGWARGS RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
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23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R38929 standard; Protein; 69 AA.
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Best Local Similarity 100.0%;
Matches 12; Conservative
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WO9313206-A.
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Sample 18; page 56; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation to properties leading to enhanced productivity and greater therapeutic properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used to tumour therapy, psoriasis or other diseases involving hyperintumour therapy psoriasis or other diseases involving hyperic LD78 analogues are Phel2>Gln, Lys44>Ser, Argl7>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
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                                                                                                                                                                                                                                                                                                                                                            LD78 Glu29>Arg.
Scri stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperprolliferation.
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Pred. No. 5.88e-02;
Pred. ....+rhes 0; Indels
Best Local Similarity 100.0%; Pred. No. 5.88e-02;
Matches 12; Conservative 0; Mismatches 0; Indels
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SCI; stem cell inhibition; LD78; ACI2; MIP-lalpha;
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Craig S, Czaplewski LG, Edwards RM, Gilbert RJ;
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Example 19; Page 56; 294pp; English.
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Craig S, Czaplewski LG, Edwards R
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                                                                                                                                                                                                                                                                 R38943 standard; Protein; 69 AA. R38943;
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Best Local Similarity 100.0%;
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WO9313206-A.
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CC Analogues of natural stem cell inhibitors, such as LD78 and MIPCC lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution componenties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used number therapy, psoriasis or other diseases involving hypercompositive stem cells.

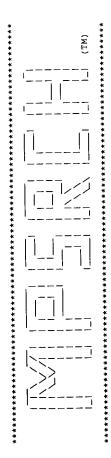
CC in the profit LD78 analogues are Phel2-GIn, Lys44>Ser, Arg17>GIn with analogues are Phel2-GIn, Lys44>Ser, Arg17>GIN with analogues correspond to the pref. LD78 analogues.

CC All Similarity 100.0%; Pred. No. 5.88e-02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CD All QVCADPSEEWVQ 12

Search completed: Fri Feb 4 17:20:57 2000
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protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 17:27:45 2000; MasPar time 2.52 Seconds 134.616 Million cell updates/sec MPsrch_pp

Tabular output not generated.

Run on:

>US-09-150-813-43 (1-12) from US09150813.pep 91 Description: Perfect Score:

1 QVCADPSESWVQ 12 Sequence:

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

swiss-prot37 1:swissprot Database:

Mean 25.122; Variance 33.379; scale 0.753 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	2.87e-08	1 530-07	1000	4.096-07	4.59e-0/	4.04e-06	2.01e-05	5.79e-05	9.78e-05	1.65e - 04	1.65e-04	1.65e-04	2.76e-04	4.63e-04	4.63e-04	4.63e-04	7.72e-04	7.72e-04	7.72e-04	Η.	ij	Н	1.28e-03	2.13e-03
Description	MACROPHAGE INFLAMMATOR			MACROPHAGE INFLAMMATOR	TONSILLAR LYMPHOCYTE L		MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	CHEMOKINE CC-1 PRECURS	MONOCYTE CHEMOTACTIC P	CHEMOKINE CC-3 PRECURS	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	T-CELL SPECIFIC RANTES	I-CELL SPECIFIC RANTES	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR
£	MANTIN OFFI	MILE GOLD	MIIB_KABII	MI1A_HUMAN	MI10_HUMAN	MI1A_RAT	MI1B_RAT	MCP1 CAVPO	MI1B MOUSE	MI1A_MOUSE	MCP4 HUMAN	MCP3 HUMAN	MIP4 HUMAN	CCC1_HUMAN	MCP2_PIG	CCC3 HUMAN	MCP1_HUMAN	MCP2 BOVIN	MCP1 CANFA	SISD MOUSE	SISD RAT	MCP2 HUMAN	MCP1_PIG	MI1B_CHICK
r C	-	٠,	٦.	Η.	П	Н	~	Н	7	Н	٦	-	-	-	·	Н	٦	Н	-	-	-	-	Н	Η.
% Query Match Length		200	77	92	93	92	92	120	92	92	86	66	68	63	66	109	66	66	101	16	92	66	66	90
% Query		100.0	96.7	94.5	94.5	90.1	86.8	84.6	83.5	(82.4	82.4	81.3	80.2	80.0	80.7	79.1	79.1	79.1	78.0	78.0	78.0	78.0	76.9
0.00	2000	16	88	86	86	82	79	77	76	7.5	7.5	75	74	7.3	73	7.3	7.2	7.2	7.2	71	7.7	7.1	7.1	70
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INTERLEUKIN-8 PRECURSO		MONOCYTE CHEMOTACTIC P		MONOCYTE CHEMOTACTIC P	EMBRYO FIBROBLAST PROT	C10 PROTEIN PRECURSOR.	MONOCYTE CHEMOTACTIC P	EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	ECTAXIN PRECURSOR (EOS	INTERLEDIKIN-8 PRECURSO	TNTERLEIMIN-8 PRECURSO	CERTIFICATION S DESCRIPTION	THIERDRAND OF THE COMPO	MACROPHAGE INFLAMMATOR	T-CELL SPECIFIC RANTES		EOTAXIN PRECURSOR (EOS
IL8_CANFA	TLS PTG	MCP1 RAT	MCP1 MOUSE	MCPB BOVIN	EMF1 CHICK	C10 MOUSE	MCP1 RABIT	FOTA MOUSE	FOTA RAT	MCPA BOVIN	MCP5 MOUSE	TI'S BOVIN	FOT HIMAN	TT. B HTIMAN	Officer of the		ILS_MACMU	MIIG_MOUSE	SISD_PIG	SISD_CAVPO	EOTA_CAVPO
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ALIGNMENTS

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                                                                                                                                                                                                                                                                                                         INDUCTION: BY MITOGENS.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC) (CHEMOKINE CC).
                                                                                                                                                The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/Tax
                      CHANG H.C., REINHERZ B.L.; "Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on
                                                                                                                       NAPOLITANO M., MODI W.S., CEVARIO S.J., GNARRA J.R., SEUANEZ H.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
                                                                                                                                                                                                                        MEDLINE; 90038522.
MILLER M.D., HATA S., WAAL MALEFYT R., KRANGEL M.S.;
"A novel polypeptide secreted by activated human T lymphocytes.";
J. IMMUNOL. 143:2907-2916(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                             responsiveness of 5' upstream sequences, and chromosomal
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BY SIMILARITY.
T -> C (IN REF. 7
A -> S (IN REF. 6
P -> L (IN REF. 5
ARKLPR -> REASS (:
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                                                                                                                                                                                      BIOL. CHEM. 266:17531-17536(1991).
                                                                         EUR. J. IMMUNOL. 19:1045-1051(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; M23502, G533213; --
EMBL; M23516; G602455; --
EMBL; J04130; G178018; --
EMBL; X53683; G34218; --
EMBL; X55682; E35870; ALT_SEQ.
EMBL; M69203; G1332376; --
EMBL; M69201; G1332376; --
EMBL; M69202; G1332376; --
EMBL; M69202; G1332376; --
EMBL; M57503; G339727; --
EMBL; M57503; G339727; --
                                                                                                                                                                                                             SEQUENCE OF 6-92 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT: HOMODIMER
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1HUN; 30-APR-94.
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A37411; A37411.
              MEDLINE; 89325421.
                                                                                                                                                                                                                                                                                                  MEDLINE; 94182137.
LODI P.J., GARRETT
                                                                                               SEQUENCE FROM N.A.
                                                                                                              91373378
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                                                                                                                                                                                                                                                                                                   01-007-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-00T-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (IMMUNE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (BY SIMILARITY).
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
STRAIN-NEW ZEALAND WHITE;
MDDLINE; 94198229.
MORI S., GGTO K., GGTO F., MUTAKAMI K., OHKAWARA S., YOSHINAGA M.;
"Dynamic changes in mRNA expression of neutrophils during the course of acute inflammation in rabbits.";
INT. IMMUNOL. 6:149-156(1994).
-I- FUNCTION: MONOKINE WITH INPLAMMATORY AND CHEMOKINETIC PROPERTIES
                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
SIGNAL 1 23 BY SIMILARITY.
CHAIN 24 92 MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
DISULFID 34 58 BY SIMILARITY.
DISULFID 35 74 BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                              ORYCTOLAGUS CUNICULUS (RABBIT).
EURARYOTA; METAZOA; CHORDAIA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                           Score 91; DB 1; Length 92;
Pred. No. 2.87e-08;
0; Mismatches 0; Indels
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      REF.
REF.
                                                                                                                                     10212 MW; F18E7AFD CRC32;
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Matches 12; Conservative
                                                                                                                                                              100.08;
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Local Similarity 91.7%;
Les 11; Conservative
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HSSP; P13236; 1HUN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SIMILARIȚY: LD78-ALPHA AND -BETA ARE VERY CLOSELY RELATED.
-!- SIMILARIȚY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                          01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-0CT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA)
(TONSILLAR LYMPHOCYTE LD78 ALPHA PROTEIN) (GOS19-1 PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOL. CELL. BIOL. 10:3646-3658(1990).
MOL. CELL. BIOL. 10:3646-3658(1990).

-i. FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.

-i. FUNCTION: BY TPA OR PHA (TPA = 12-0-TETRADECANOYL PHORBOL-13
ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SLUM S., FORSDYKE R.E., FORSDYKE D.R.; Three human homologs of a murine gene encoding an inhibitor of stem
                                                                                                                                                                                                                                                                                                                                         ZIPFEL P.F., BALKE J., IRVING S.G., KELLY K., SIEBENLIST U.; "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAKAO M., NOMIYAMA H., SHIMADA K.; "Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                OBARU K., FUKUDA M., MAEDA S., SHIMADA K.;
"A cDNA clone used to study mRNA inducible in human tonsillar
lymphocytes by a tumor promoter.";
J. BIOCHEM. 99:885-894(1986).
                                                                                                                                                                                 EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; i18; 1.
                                                                                                                                            (PAT 464.1) (SMALL INDUCIBLE CYTOKINE A3) SCYA3 OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 91103879.
BLUM S., FORSDYKE R.E., FORSDYKE D.R.;
                                                                                                                                                                                                                                                                                                                                                                                          r. IMMUNOL. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cell proliferation.";
NA CELL BIOL. 9:589-602(1990).
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EMBL; M23178; G182847; -.
EMBL; D90144; G219906; -.
                                                                                01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQI
01-OCT-1996 (REL. 34, LAST ANNO
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                                                          STANDARD;
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PIR; A30574; A30574.
                                                                                                                                                                            HOMO SAPIENS (HUMAN).
        1 OVCADPSESWVQ 12
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                                                         MI1A_HUMAN
P10147:
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MOL. CELL. BÍOL. 10:3646-3658(1990).
-i- SIMILARITY: 464.1 AND 464.2 ARE VERY CLOSELY RELATED.
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FINE: 91103879.
MEDLINE; 91103879.
BLUM S., FORSDYRE D.R.;
BLUM S., FORSDYRE R.E., FORSDYRE D.R.;
Three human homologs of a murine gene encoding an inhibitor of stem
"Three human homologs of a murine gene encoding an inhibitor of stem
"Three human homologs.";
                                           POLICIALE INFLAMMATORY PROTEIN 1-ALPHA.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-AUG-1990 (REL. 15, CREATED)
01-AUG-1990 (REL. 15, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
TONSILLAR LYMPHOCYTE LD78 BETA PROTEIN PRECURSOR (G0S19-2 PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=BLOOD;
MEDILES; 90287702.
IRVING S.G., ZIPFEL P.F., BALKE J., MCBRIDE O.W., MORTON C.C.,
BURD P.R., SIEBENLIST U., KELLY K.;
"Two inflammedory mediator cytchine genes are closely linked and
variably amplified on chromosome 17q.";
NUCLEIC ACIDS RES. 18:3261-3270(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAKRO M., NOMIYAMA H., SHIMADA K.; "Structures of human genes coding for cytokine LD78 and their
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERLA;
PRIMATES; CATARRHINI; HOMINIDAB; HOMO.
                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                        Length 92;
INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                        Score 86; DB 1; Le
Pred. No. 4.59e-07;
0; Mismatches 1;
                                                                                                                                   C24DD919 CRC32;
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EMBL, M24110; G182849; -.
EMBL, D90145, G219908; -.
PIR; B30908; B30908.
PIR, B36712; B30412.
PIR, S10157; S10157.
MIM; 601395; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93 AA.
                                                                                                                                         10085 MW;
                                                                                                                                                                                              94.58;
                                                                                                                                                                                                                     Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
     CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                             71 QVCADPSEEWVQ 82
                                                                                                                                                                                                                                                                                                                                                               1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 90287155.
                                                                                                                                            92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA3L1 OR 464.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expression.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LT 4
MI10_HUMAN
P16619;
                                                                                                                                               SEQUENCE
                                                                                       DISULFID
                                                                                                               DISULFID
                                                                                                                                                                                                    Query Match
                                   SIGNAL
                                                                CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MERGAMA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;

MARAGAMA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;

MARAGAMA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;

"CYPOKING-Linduced neutrophil chemoattractant (CINC)-2 alpha, a novel

"T "CYPOKING B. TO THE STATE THE CHAMBATORY AND CHEMOKINE produced by

"T "CHAMBO B. TO THE STATE THE STATE THE STATE S
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SHI M.W., GODIESKI J.J., PAULAUSKIS J.D.;
"Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages.";
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SHANLEY T.P., SCHWAL H., FRIEDL H.P., JONES M.L., WARD P.A., Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
                                                                                                                                                                                                                                                                                                       ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                         LD78 BETA / GOS19-2 / 464.2.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                 Length 93;
                                                                                                                                                                                                                                              Score 86; DB 1; L
Pred. No. 4.59e-07;
                                                                                                                                                                                           21EDDB04 CRC32;
                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ite lung injury in rats.";
IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
STRAIN-LONG EVANS; TISSUE-LUNG;
MEDLINE; 95238980.
                                                      CYTOKINE; CHEMOTAXIS; SIGNAL.
                                                                                                                                                                                   93 AA; 10161 MW;
                                                                                                                                                                                                                                         h 94.5%;
Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=CD-1; TISSUE=LUNG;
MEDLINE; 95298037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RATTUS NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C-C) (CHEMOKINE CC),
PFAM; PF00048; i18; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                        72 QVCADPSEEWVQ 83
                                                                                                                                                                                                                                                                                                                                                                   1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 24-57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LT 5
MI1A_RAT
                                                                                                                                  DISULFID
                                                                                                                                                                                   SEQUENCE
                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                         Query Match
                                                                                 SIGNAL
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                                                                                                         CHAIN
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                  MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                   CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                        01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-0CT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA).
                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                    RATTUS NORVEGICUS (RAT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                         BY SIMILARITY.
BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                    DB 1; Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL. SIGNAL.

23 BY SIMILARITY.
                                                                                                                                                                                            Pred. No. 4.04e-06;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 79; DB 1; Le
Pred. No. 2.01e-05;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3C82B006 CRC32;
                                                                                                                                                                                                                                                                                                        92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY
BY SIMILARITY
       EMBL; U22414; G790633; -.
EMBL; U06435; G459150; -.
PROSITE; PS00042; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. 
PFAM; PF00048; 118; 1. 
HSSP; P13236; 1HUN.
                                                                                                                                                                                   Score 82;
                                                                                                                                                                                                                                                                                                       PRT;
                                                                                    23
92
N3
73
6
57
10335 MW;
                                                                                                                                                                               Query Match
Best Local Similarity 75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92 AA; 10234 MW;
                                                                                                                                                                                                         9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81.8%;
                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U06434; G459148; -.
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| QVCADPSESWVQ 12
                                                                                                                                                                                                                             71 QICADPKETWVQ 82
                                                                                                                                                      92 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                           SCYA4 OR MIP1B
                                                                                                                               CONFLICT
                                                                                                         DISULFID
                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                        RESULT 6
ID MI1B_RAT
                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
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                                                                                                                                                                                                                                                                                                                P50230;
                                                                                  SIGNAL
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                                                                                              CHAIN
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SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                    -i- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (H400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                      "cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein.";
J. IMMUNOL. 150:5025-5032(1993).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SHERRY B., TEKAMP-OLSON P., GALLEGOS C., BAUER D., DAVATELIS G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                EUKARYOTA; METAZÒA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                         01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JTL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 120;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 77; DB 1; LA Pred. No. 5.79e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22FAD257 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
                             120 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY
                                                                                                                                                                                                                     RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
PPAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
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                               PRT;
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                                                                     01-NOV-1995 (REL. 32, CREATED)
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                                                                                                                                                                                   CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84.68;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; L04985; G349821; -.
                                                                                                                                                                                                                                                                                    STRAIN=Z; TISSUE=SPLEEN; MEDLINE; 93267104.
                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23
120
24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 QVCADPSESWVQ 12
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34
97
120 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                    [1]
SEQUENCE FROM N.A.
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                                                                                                                                                                     SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                             TOSHIMURA T
                                 MCP1_CAVPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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p10855; p14096;
01-JUL-1989 (REL. 11, CREATED)
01-APR 1990 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA) (TY-5)
(SIS-ALPHA) (HEPARIN-BINDING CHEMOTAXIS PROTEIN) (L2G25B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i - FUNCTION: MONOKÍNE WITH ÎNFLAMMATRY AND CHEMOKINETIC PROPERTIES.
-i - SUBUNIT: HOMODIMER (BY SIMILARITY).
-i - SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
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WOLPE S.D., MASIARZ F., COIT D., CERAMI A.;
"Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.";
J. EXP. MED. 168:2251-2259(1988).
                                                                                                                                                                                                                                   BROWN K.D., ZURRAKEI S.M., MOSMANN T.R., ZURRAWSKI G.;
"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. IMMUNOL. 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=DBA/2J; TISSUE=LIVER;
DAUBERSIES P., LEPRETRE F., BAILLEUL B., GROVE M., PRAGNELL I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODEMTIA; SCIURGUATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBMITTED (OCT-1991) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.

BY SIMILARITY.

A -> P (IN REF. 1).

C -> H (IN REF. 1).
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Pred. No. 9.78e-05;
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3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; M23503; G533245; --
EMBL, M35590; G199697; --
EMBL; X62502; G53127; --
PIR; C30552; C30552.
PIR; JL0088; JL0088.
MGD; MGI:98261; SCYA44.
PROSITE: PSO0472; SMALL_CYTOKINES_CC; 1.
PPAM; PF00048; 118; 1.
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1 QVCADPSESWV 11
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                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                          89093958
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCREAS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Genomic structure of murine macrophage inflammatory protein-1 alpha and conservation of potential regulatory sequences with a human homolog, LD78.";
                                                                                                                                                                                                                                                                                                                                                                                                        ROVE M., LOWE S., GRAHAM G., PRAGNELL I., PLUMB M.;
Sequence of the murine haemopoietic stem cell inhibitor/macrophage
                                         DAVATELIS G., TEKAMP-OLSON P., WOLPE S.D., HERMSEN K., LUEDKE C., GALLEGOS C., COIT D., MERRYWEATHER J., CERAMI A.;
"Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.";
J. EXP. MED. 167:1939-1944(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, AND B10.S/J; TISSUE-SPLEEN; MA R.Z., TEUSCHER C.; SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                              VATELIS G., TEKAMP-OLSON P., WOLPE S.D., HERMSEN K., LUEDKE C.,
LLEGOS C., COIT D., MERRYWEATHER J., CERAMI A.;
EXP. MED. 170:2189-2189(1989).
                                                                                                                                                                                                                                                    BROWN K.D., ZURAWSKI S.M., MOSMANN T.R., ZURAWSKI G.,
A family of small inducible proteins secreted by leukocytes are
members of a new superfamily that includes leukocyte and
fibroblast-derived inflammatory agents, growth factors, and
indicators of various activation processes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 91237116.
WIDMER U., YANG Z., VAN DEVENTER S., MANOGUE K.R., SHERRY B.,
CERAMI A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "CDNA sequences of two inducible T-cell genes.";
PROC. NATL. ACAD. SCI. U.S.A. 86:1963-1967(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammatory protein 1 alpha gene.";
NUCLEIC ACIDS RES. 18:5561-5561(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KWON B.S., WEISSMAN S.M.;
              SEQUENCE FROM N.A.
                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 91016858.
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                               88258380
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SEQUENCE OF 24-42.
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                                                                                                                                                                DAVATELIS G.,
GALLEGOS C., C
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                                                                                                                                                   REVISIONS.
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                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N.,
LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;
"Human monocyte chemoattractant protein (MCP)-4 is a novel CC
chemokine with activities on monocytes, eosinophils, and basophils
induced in allergic and nonallergic inflammation that signals through
I. IS7:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                 Length 92;
                                                                                                                                                                                                                                                       INFLAMMATORY RESPONSE; SIGNAL,
                                                                                                                                                                                                                                                                                                                 F -> L (IN REF. 3).
V -> A (IN REF. 3).
53979E5E CRC32;
                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 1.65e-04;
3; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                Score 75; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98 AA.
                                                                                                       BY SIMILARITY BY SIMILARITY
 or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
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                                                                                                                                                                                                                                                                                                                         62 v
10345 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-UUL-1998 (REL. 36, CREATED)
15-UUL-1998 (REL. 36, LAST SEQI
15-DEC-1998 (REL. 37, LAST ANN
                      EMBL, M23447, G533241, --
EMBL, X12511, G53123, --
EMBL, X53372, G297531, --
EMBL, J04441, G201525, --
EMBL, M73061, G199695, --
                                                                                                                                                                                                                                                                                                                                                             82.48;
                                                                                                                                                                                                                                                                                                                                                                          larity 66.7%;
Conservative
                                                                                EMBL; AF065939; G3158440;
EMBL; AF065940; G3158442;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
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                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                        71 QICADSKETWVQ 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMAN)
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                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                     92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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CONFLICT
SEQUENCE
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                                                                                                                                                                                                                                                                SIGNAL
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RESULT
                                                            this SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its way non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FUNDGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE. (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                              POWER C.A. MEYER A., RISON S.C.G., GUYE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
--- BASOPHILS AND EGSINOPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCHMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONLLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHROCOLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
EXOGENOUS PATHOGENS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MASS SPECTROMETRY: MW-9314; MW_ERR-30; METHOD-MALDI; RANGE-17-98.
MASS SPECTROMETRY: MW-8760; MW_ERR-30; METHOD-MALDI; RANGE=22-98.
MASS SPECTROMETRY: MW-8575; MW_ERR-30; METHOD-MALDI; RANGE=24-98.
INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
INSUE SPECIFICITY: WIDELY EXPRESSED. FOUND. IN SMALL INTESTINE, THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
          MEDLINE; 97341179.

MEDLINE; 97341179.

MERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACKULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESX D., SCOTT M., GROOT P.H.E., MACPHEE C.; Cloning, in vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
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Pred. No. 1.65e-04;
2; Mismatches 2; Indels
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                       DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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DF52F6EC CRC32;
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                                                                                                                                                                                 BIOL. CHEM. 272:16404-16413(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; X98306; E248571; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U46767; G1732123; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PFAM; PF00048; 118; 1.
HSSP; P13500; 1DOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98 AA;
                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                             SEQUENCE FROM N.A.
TISSUE-FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601391;
                                                                                                                                                                     receptor 2B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BIOCHEMISTRY 36:4412-4422(1997).
BIOCHEMISTRY 36:4412-4422(1997).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTE ANTI-TUMOR
ECSINOPHILS, BUT NOT NEUTROPHILS. AGGNENTS MONOCYTE ANTI-TUMOR
ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN
CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.;
"Determination of the three-dimensional structure of CC chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MINTY A., CHALON P., GUILLEMOT J.C., KAGHAD M., LIAUZUN P., MAGAZIN M., MILOUX B., MINTY C., RAMOND P., VITA N., LUPKER J., SHIRE D., FERRARA P., CAPUT D.; "Molecular cloning of the MCP-3 chemokine gene and regulation of its expression.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPDENAKKER G., FITEN P., NYS G., FROYEN G., VAN ROY N., SPELEMAN F.,
LAUREYS G., VAN DAMME J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPDENAKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; OPDENAKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; Human monocyte chemotactic protein-3 (MCP-3): molecular cloning of the cDNA and comparison with other chemokines."; BIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.; "Structural characterization of a monomeric chemokine: monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             monocyte chemoattractant protein 3 by 1H two-dimensional NMR
                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-99.
99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                          CHEMOATTRACTANT PROTEIN 3) (NC28).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRUCTURE BY NMR, AND SUBUNIT.
                                                                        01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQU
15-JUL-1998 (REL. 36, LAST ANNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chemoattractant protein-3.";
FEBS LETT. 395:277-282(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- PTM: O-GLYCOSYLATED.
              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             - i - SUBUNIT: MONOMER
                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-OSTEOSARCOMA; MEDLINE; 92308855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 93305913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97263733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 30-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRUCTURE BY NMR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            93213290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94375065
                                                                                                                                                                                                                                                     SCYA7 OR MCP3
          MCP3_HUMAN
P80098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE;
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SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UL-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND
ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE
SCYAI8 OR MIP4.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MINTAR R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.;
"A novel human CC chemokine PARC that is most homologous to
macrophage inflammatory protein-1 alpha/LD78 alpha and chemotactic
for I lymphocytes, but not for monocytes.";
J. IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                         CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                         MONOCYTE CHEMOTACTIC PROTEIN 3.
                                                                                                                                                                                                                                                                                                                                                         PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.

T -> K (IN REF. 4).

MISSING (IN REF. 4).

7502E19C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 1.65e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Macrophage inflammatory protein-3 and -4.";
PATENT NUMBER US5504003, 02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY. SIMILARITY.
                                                                                                                                                                                                                                                          PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
                                                                                                                    EMBL; X72309; -; NOT_ANNOTATED_CDS.
EMBL; X71087; G288399; -
EMBL; X71087; G288398; ALT_INIT.
EMBL; X71087; G288398; ALT_INIT.
PIR; JC1478; JC1478.
PIR; S32222; S32222.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 75;
                                                                                                                                                                                                                                                                                                      INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                   EMBL; X72308; G313708; ALT_INIT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1997 (REL. 35, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                              11200 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Larity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                               15-OCT-97.
                                                                                                                                                                                                                                                                          PFAM; PF00048; i18;
CYTOKINE; CHEMOTAXIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 EICADPTQKWVQ 84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                            99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H., RUBEN S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MIP4_HUMAN
P55774;
                                                                                                                                                                                                                               PDB; 1NCV;
                                                                                                                                                                                                                                                                                                                                                 MOD_RES
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                               CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                         SIGNAL
                                                                                                                                                                                                                                                                                                                                    CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                        MEDLINE; 97275308.

WELLS T.N.C., PEITSCH M.C.;
WELLS T.N.C., PEITSCH M.C.;
WELLS T.N.C., PEITSCH M.C.;
WELLS T.N.C., PEITSCH M.C.;

Characterization of novel chemokines using the Worldwideweb and expressed sequence tag databases.";

-1. LEUNC. BLOL. 61:550(1997).

-1. FUNCTION: CHEMOTACTIC FALTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES.

-1. TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THE LUNG. A LOWER LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODES,

THYNUS AND APPENDIX.
                                                                                                                                                                                                                             -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCHULZ KNAPPE P., MAEGERT H.-J., DEWALD B., MEYER M., CETIN Y., KUBBIES M., TOMECZKOWSKI J., KIRCHHOFF K., RAIDA M., ADERMANN K., KIST A., REINEKER M., SILLARD R., PARDIGOL A., UGUCCIONI M., BAGGIOLINI M., PORSSMANN W.-G., "HCC-1, a novel chemokine from human plasma.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MACROPHAGE INFLAMMATORY PROTEIN 4.
BY SIMILARITY.
BY SIMILARITY.
052AA3DC CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 74; DB 1; Lengum c...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PARDIGOL A., MAEGERT H.-J., ZUCHT H.D., FORSSMANN W.-G., SCHULZ-KNAPPE P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
SCYAL4 OR NCC2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND SEQUENCE OF 20-93.
TISSUE=BONE MARROW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1. HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRA
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AB000221; D1022520; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89 AA; 9849 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.3%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
             DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Y13710; E321838;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |:||||: |||
| QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 QICADPNKKWVQ 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 96136773.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCC1_HUMAN
016627;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCC3_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                        PORSSBANN W.-G.;

C. SUBMITTED (OCT-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.

SUBMITTED (OCT-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.

C. PUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA

RECEPTORS THAT ALSO RECOGNIZE MID-1 ALPHA. IT INDUCED

INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,

AT CONDENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T

LYMPHOCYTES, NEUTROPHILS, AND ENSINOPHIL LEUKOCYTES. ENHANCES THE

PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.

C. 1- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL

TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE

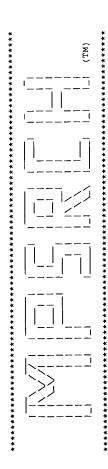
TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE

C. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE

C.-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 95091716.
HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., WUTTKE W.W.
SCHEIT K.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 93;
      SUBMITTED (MAY-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 73; DB 1; Li
Pred. No. 4.63e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
BY SIMILARITY.
A3E7BCAD CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHEMOKINE CC-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MIM; 601392; -
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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P49873;
01-OCT-1996 (REL. 34, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93 AA; 10678 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80.2%;
ilarity 63.6%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; Z49270; G1004269; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; Z49269; G1004267; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; Z70292; E233856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 VCTNPSDKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 VCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
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                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PARDIGOL A., MAEGERT H.-J., ZUCHT H.D., FORSSMANN W.-G., SCHULZ-KNAPPE P.; SCHULZ-KNAPPE P.; SUBMITTED (MAY-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                           MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL.
CHEMOKINE CC-3.
BY SIMILARITY.
BY SIMILARITY.
N; 9AE90F93 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 73; DB 1; Le
Pred. No. 4.63e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 73; DB 1; L
Pred. No. 4.63e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
BY SIMILARITY.
BY 620BCF CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       109 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; Z70293; E233858; -.
PROSITE; PSO0472; SWALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                   or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 PO
109 CH
75 BX
91 BX
12297 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99 AA; 10903 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 80.2%;
Best Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                     EMBL; Z48480; G683719; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73 EVCADPQQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 OVCADPSESWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                               HSSP; P80098; 1NCV
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Matches 7; Conservative 3; Mismatches 1; Indels 0; Gaps 0; Search completed: Fri Feb 4 17:27:51 2000 Job time : 6 secs. 90 VCINPSDKWVQ 100 ||::||: ||| 2 VCADPSESWVQ 12 Qγ



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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:27:12 2000; MasPar time 3.58 Seconds 134.363 Million cell updates/sec Run on:

>US-09-150-813-43 (1-12) from US09150813.pep 91

Tabular output not generated.

1 QVCADPSESWVQ 12 Description: Perfect Score: Sequence:

122810 seqs, 40068593 residues PAM 150 Gap 15

Scoring table:

Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Mean 24.455; Variance 36.695; scale 0.666 Statistics:

pir60 1:pir1 2:pir2 3:pir3 4:pir4

Database:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	4.73e-07	4.73e-07	Ξ.	•	5.68e-06	4.01e-05	4.39e-04	7.04e-04	1.13e - 03	1.13e-03	1.80e-03	2.85e-03	4.53e-03	7.16e-03	7.16e-03	7.16e-03	1.13e - 02	1.13e-02	1.13e-02	1.13e-02	1.13e - 02	1.13e-02	1.13e-02
Description	monocyte adherence-in	macrophage inflammato	immune activation gen	macrophage inflammato	LD78-beta protein pre	macrophage inflammato	monocyte chemoattract	macrophage inflammato	macrophage inflammato	monocyte chemotactic	lymphocyte and monocy	monocyte chemoattract	monocyte chemoattract	monocyte chemoattract	monocyte chemotactic	monocyte chemoattract	interleukin-8 - dog	interleukin-8 - sheep	interleukin 8 - sheep	interleukin-8 precurs	alveolar macrophage c	PDGF-inducible JE gly	immediate-early serum
А	C60407	A31767	146730	A30574	B35673	152322	148147	C30552	A32393	A54678	JE0177	JC2417	A60299	A46539	JC5295	JC2136	JN0841	146997	S42496	A53096	A44253	A30209	S07723
98	~	Н	7	~	7	~	~	7	7	~	7	~	7	-	7	7	7	~	7	~	7	7	7
% Query Match Length DB	50	92	92	92	93	92	120	92	92	109	120	66	66	91	66	66	95	101	101	103	103		148
% Query Match	100.0	100.0	7.96	94.5	94.5	90.1	84.6	83.5	82.4	82.4	81.3	80.2	79.1	78.0	78.0	78.0	76.9	76.9	76.9	76.9	76.9	76.9	76.9
Score	91	91	88	86	86	82	77	16	75	75	74	73	72	71	71	7.1	7.0	7.0	7.0	70	70	70	70
Result No.	1	10	m	4	Ŋ	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23

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ALIGNMENTS

C60407 #type fragment monocyte adherence-induced protein 5 beta - human (fragment) #formal_name Homo sapiens #common_name man 06-Nov-1992 #sequence_revision 06-Nov-1992 #text_change 03-May-1996	eren	Loverory not compared wit le_type mRNA series 1-50 ##label SPO #superfamily macrophage inflammato #length 50 #checksum 9927	Similarity 12; Conse	12	A31767 #type complete macrophage inflammatory protein 1-beta precursor - human macrophage inflammatory protein 1-beta precursor - human cytokine Hc21; G-26 protein; H400 homolog; lymphocyte activation gene 1 protein (LAG-1); MIP-1beta; pAT744; SCYA2 protein (misidentification); SIS gamma homolog; T-cell activation protein 2 (Act-2); T-cell activation protein qamma	#formal_name Homo sapiens #common_name man 07-Jun-1990 #sequence_revision 29-May-1998 #text_change 29-May-1998 JH0319; A40978; A31767; A37411; B30574; B45817; D30552 JH0319 Baixeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.; Mechiche, S.; Vlegas-Pequignot, E.; Hercend, T.; Triebel, F.
RESULT 1 ENTRY TITLE ORGANISM DATE	REFERENCE # authors # journal # title # cross refe	#accession ##status ##molecule ##residues CLASSIFICATION SUMMARY	luery Match Best Local Matches	30	ENTRY TITLE ALTERNATE_NAMES	ORGANISM DATE ACCESSIONS REFERENCE #authors

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#authors Chang, H.C.; Reinherz, E.L.
#journal Eur. J. Immunol. (1989) 19:1045-1051
#title Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2
#cross-references MUID:89325421
#accession A37411
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A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors,
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                                                                                                                                                                     ##residues 1-92 ##label BAI ##cross-references GB:X53682; NID:g34217; PID:g34218 ##experimental_source natural killer cell, strain CD3-CD2+, F5, 5IIIE5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #journal Proc. Natl. Acad. Sci. U.S.A. (1988) 85:9704-9708
#title identification, cloning, and characterization of an immune activation gene.
#cross references MUID:89071764
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#ittle Mitogenic activation of human T cells induces two closely
related genes which share structural similarities with a
#cross-references MUID:89140347
                                                                                                                                                                                                                                                                                                  #authors Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.; Senancz, H.N.; Leonard, W.J.

#journal J. Bloil. Chem. (1991) 266:17531-17536

#title The gene encoding the Act-2 cytokine. Genomic structure, HTLV-1/tax responsiveness of 5' upstream sequences, and chromosomal localization.
Mol. Immunol. (1990) 27:1091-1102
Cloning and expression of a lymphocyte activation gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.;
Leonard, W.J.
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A novel polypeptide secreted by activated human T
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##molecule_type mRNA
##residues 1-92 ##label LIP
##cross-references GB:J04130; NID:g178017; PID:g178018
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##cross-references GB:M25316; NID:g602454; PID:g602455
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##cross-references GB:M57503; NID:9339726; PID:9339727
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##cross-references GB:X16166; NID:g32035; PID:g32036
                                                                                                                 ##molecule_type DNA ##residence_type DNA
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This protein is secreted by activated lymphocytes and monocytes. It is bound by chemokine (Cy receptor 5 (see PIR:A43113) and receptor 1 (see PIR:A45177).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               #domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
#disulfide_bonds #status experimental
#length 92 #molecular-weight 10212 #checksum 7597
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                                                                                                                                       #authors Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
#submission submitted to the Brookhaven Protein Data Bank, January 1994
#cross-references PDB:1HUM
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Yoshinaga, M.
Int. Immunol. (1994) 6:149-156
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macrophage inflammatory protein 1-alpha precursor - human
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FICATION #superfamily macrophage inflammatory protein
X #length 92 #molecular-weight 10066 #checksum 5637
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and indicators of various activation processes.
#cross-references MUID:89093958
#accession D30552
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Pred. No. 4.73e-07;
0; Mismatches 0; Indels
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Pred. No. 2.11e-06;
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#map_position 17q21-17q21
#introns 26/1; 64/2
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   predicted #label AART'
   #langitude product #status predicted
#langitude product #status predicted
#length 92 #molecular-weight 10085 #checksum 4316
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J. Biochem. (1986) 99:885-894
A cDNA clone used to study mRNA inducible in human tonsillar
lymphocytes by a tumor promoter.
                                                                                                                                                                              Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. (1990) 10:3646-3658
Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
DNA Cell Biol. (1990) 9:589-602
Three human homologs of a murine gene encoding an inhibitor
     LD78-alpha protein precursor; lymphocyte tumor promoter-induced protein; macrophage inflammatory protein homolog GOS19-1; MIP-lalpha; pA7464; small inducible cytokine A3; T-cell activation protein 1 #formal_name Homo sapiens #common_name man 03-Aug-1992 #sequence_revision 03-Aug-1992
                                                                                                                                                                                                                                                                                                                                                                       # fournal J. Immunol. (1989) 142:1582-1590
#fitle Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors.
#across-references MUID:89140347
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#cross-references GB:M25315; NID:9602452; PID:9602453
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LD78-beta protein precursor - human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of stem cell proliferation.
#cross-references MUID:91103879
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##residues 1-92 ##label OBA
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Best Local Similarity 91.7%;
Matches 11; Conservative
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#authors C.C.; Burd, P.R.; Siebenlist, U.; Kelly, K. C.C.; Burd, P.R.; Siebenlist, U.; Kelly, K. Worton, #journal Nucleic Acids Res. (1990) 18:3261-3770 #title Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #domain signal sequence #status predicted #label SIG\
#product LD78-beta protein #status predicted #label MAT
#length 93 #molecular-weight 10161 #checksum 7784
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##cross_references EMBL.X52149; NID:934750; PID:9296666
##cross_references EMBL.X52149; NID:934750; PID:9296666
T This protein is a member of a "small inducible" or "activation
specific" gene family, is likely to be an early-acting
interleukin, and is the product of a putative G0/G1 switch gene.
                                                                                                                                                                                       Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. (1990) 10:3646-3658
Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                preliminary; not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                             #residues 1-93 ##label NAK #cross-references GB:D90145; NID:g219907; PID:d1014876; PID:g219908
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
inducible cytokine A4
#formal_name Homo sapiens #common_name man
28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ##cross-references GB:M24110; GB:M32338; NID:g182848; PID:g182849
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Pred. No. 5.68e-06;
0; Mismatches 1; Indels
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#map_position 17q11-17q21
#introns 26/1; 64/2
                                                                                              24-Sep-1998
B35673; B30412; S10157; B30908
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##molecule_type DNA
****osidnes 1-93 ##label BLU
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cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
#journal J. Immunol. (1989) 142:679-687
#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, #cross-references MuID:89093958
#accession C30552
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macrophage inflammatcry protein 1-beta precursor - mouse
H400: SIS gamma: T-cell activation protein gamma
#formal_name Mus musculus #common_name house mouse
28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change
                                                                                                                                                                                                                                                                                                      Gaps
                    Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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##residues
##cross-references EMBL.U22414; NID:9790632; PID:9790633
FICATION #superfamily macrophage inflammatory protein
Y #length 92 #molecular-weight 10335 #checksum 3184
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    Biochem. Biophys. Res. Commun. (1995) 211:289-295
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                                                                                        preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                  1; Indels
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Pred. No. 4.39e-04;
3; Mismatches 1; Indels
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#length 120 #molecular-weight 13741 #check
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2; Mismatches 1
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J. Immunol. (1993) 150:5025-5032
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                                                           macrophages.
#cross-references MUID:95298037
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                                                                                                                                                                                                                                                       90.1%;
Similarity 75.0%;
9; Conservative
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Best Local Similarity 66.7%;
Matches 8; Conservative
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1 QVCADPSESWVQ 12
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#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
                                               Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.;
Davatelis, G.; Wolpe, S.D.; Masiarz, F.; Coit, D.; Cerami,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
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                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Daubersies, P.; Lepretre, F.; Bailleul, B.; Grove, M.;
Pragnell, I.; Plumb, M.
#submission submitted to the EMBL Data Library, October 1991
#description Sequence of the murine macrophage inflammatory protein 1b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A32393 #type complete
macrophage inflammatory protein-1-alpha precursor - mouse
heparin-binding chemotaxis protein; L2G25B protein;
SCI/MIP-1a, SIS alpha; stem cell inhibitory/macrophage
inflammatory protein 1-alpha; T-cell activation protein
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#title Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein 1-alpha gene.
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##molecule_type DNA
##residues 1-92 ##label GRO
##cross-references EMBL:X53372; NID:954062; PID:9297531
##note the authors' translation of the nucleotide sequence
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17-Jul-1992_#sequence_revision 17-Jul-1992 #text_change
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192 #molecular-weight 10168 #checksum 7516
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Pred. No. 7.04e-04;
3; Mismatches 0; Indels
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##cross-references GB:M23503; NID:9533244; PID:9533245
                                                                                                                                                                                                                                                     ##modecule_type_mRNA
##residues 1-92 ##label SHE
##cross-references GB:M35590; NID:9199696; PID:9199697
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                                                                                                                                                                                                                                                                                                                                      ##molecule_type protein
##molecule_type protein
##residues 24-33,'XX',36,'X',38 ##label SH2
                                                                                                                        (1988) 168:2251-2259
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Best Local Similarity 72.7%;
Matches 8; Conservative
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##molecule_type DNA
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#journal J. Exp. Med. (1988) 168:2251-2259
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
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#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
#cross-references MUID:89093958
                                                                                                                                                                                                                                                                                                                                                                                                        #journal J. Exp. Med. (1988) 167:1939-1944

#title Cloning and characterization of a CDNA for murine macrophage inflammatory protein (MTP), a novel monokine with inflammatory and chemokinetic properties.

#cross-references_MUID:88258380
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #accession S04535
##molecule_type mRNA
##molecule_type mRNA
##residues 1-48,'E',50-90,'I',92 ##label DA2
##residues BMBL:X12531
##ross-reference BMBL:X12531
##note the authors translated the codon GAG for residue 49 as
##note Asp and ATT for residue 91 as Asn
Asp and ATT for residue 91 as Asn
##note the sequence has been corrected in reference A53885
##note S015. Hermsen, R.;
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            differs at several positions from the sequence given
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#title Macrophages secrete a novel heparin-binding protein with inflammatory and neutrophil chemokinetic properties.
#cross-references MUID:88154745
#Journal Kwon, B.S.; Weissman, S.M.
#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
#title cDNA sequence of two inducible T-cell genes.
#across-references MUID:89184547
##monormal A32393
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##residues 24-33,'XX',36-42 ##label WOL
##residues 26-Met, 30-Pro, and 39-Thr were also found
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##cross-references GB:J04491; NID:g201524; PID:g201525
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##residues 1-92 ##label DAV
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Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, P.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. Submitted to the EMBL Data Library, March 1993 Molecular cloining of MCP-3: a human monocyte-derived monocyte chemoattractant protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408
The human MCP-3 gate (SCYR7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
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Opdenakker, G.; Froyen, G.; Fiten, P.; Proost, P.; Van Damme,
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#authors Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.; Sherry, B.; Cerami, A. #journal J. Immunol. (1991) 146:4031-4040 genomic structure of murine macrophage inflammatory protein-1-alpha and conservation of potential regulatory sequences with a human homolog, LD78. #accession 156104
                                                                                                                                                                                                                                                                                                                                                                                                                                                  #domain signal sequence #status predicted #label SIGN #product macrophage inflammatory protein #status experimental #label MAT #length 92 #molecular-weight 10345 #checksum 5009
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##residues 1-109 ##label MIN
##cross-references EMBL:X71087; NID:9288396; PID:9288397
                                                                                                                                                                                                        preliminary; translated from GB/EMBL/DDBJ
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##residues 1-109 ##label OPD
##cross-references GB:X72309
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#journal Blochem Biophys. Res. Commun. (1998) 247:217-222
Isolation and characterization of LMC, a novel lymphocyte and monocyte Chemoattractant human CC chemokine, with myelosuppressive activity.
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#formal_name Sus scrofa domestica #common_name domestic pig
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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Scheit, K.H.
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Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by CDNA cloning and northern
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#binding_site carbohydrate (Asn) (covalent) #status
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#length 109 #molecular-weight 12356 #checksum 1535
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Pred. No. 1.13e-03;
4; Mismatches 1; Indels
                                                   #egne GDB:SCYA7; SCYA6; MCP-3
##cross-references GDB:138473; OMIM:158106
#map_position 17q11-17q12
#introns #superfamily macrophage inflammatory protein cytokine; glycoprotein; inflammation
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#accession JC2417
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imilarity 58.3%;
7; Conservative
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Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a monocyte secretory
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FEBS Lett. (1989) 244:487-493
Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #authors Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
#journal Biochem. Biochhys. Res. Commun. (1990) 169:346-351
#title Structure of human monocyte chemotactic protein gene and its
regulation by TPA.
#cross_references_MUID:90290466
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monocyte chemcattractant protein 1 precursor - human
GDCF-1; glioma-derived monocyte chemcatcic factor 1; MCAF;
MCP-1; monocyte chemcatcic factor 1; monocyte secretory
protein; tumor-derived chemcatcic factor 2;
protein; tumor-derived chemcatcic factor 2;
ploma-derived chemciatic factor 2;
#formal_name Homo saplens #common_name man
20_Feb-1993 #sequence_revision 20-Feb-1993 #text_change
                                                                          #domain signal sequence #status predicted #label SIG\
#product monocyte chemoattractant protein-2 #status
predicted #label MAT
#length 99 #molecular-weight 10903 #checksum 7556
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                                                                                                                                                                                                                                                                                  Gaps
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A34561; I57488; JC1096
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#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte Ohemoattractant protein-1 (MCP-1).
#cross-references MUID:92095166
                                                                                                                                                                                                                Score 73; DB 2; Length 99;
Pred. No. 2.85e-03;
2; Mismatches 2; Indels
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##molecule_type mRNA
                      *superfamily macrophage inflammatory protein
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##experimental_source corpus luteum
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#cross-references MVID:89153605
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Best Local Similarity 66.7%;
Matches 8; Conservative
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#journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.
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                                                                                                                                              A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and
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MOL. Cell. Biochem. (1993) 126:61-68
The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
                                                                    Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.; Appella, E. Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1850-1854 Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune
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Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte
chemoattractant protein-1 (MCP-1) gene.
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CLASSIFICATION #superfamily macrophage inflammatory protein
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##residues 1-99 ##label LIY
##cross-references GB:S69738; NID:9545464; PID:9545465
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##cross-references GB:M24545; NID:g187434; PID:g307163
                   ##cross-references GB:S71513; NID:g240867; PID:g240868
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##residues 29-33,'XX',36-52;82-92 ##label DEC
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##moidnes 24-28,'Q',30-99 ##label YEQ
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                                                                                                                             Int. J. Cancer (1990) 45:795-797
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##residues /X',25-99 ##label ROB
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##molecule_type mRNA
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1-99 ##label YO2
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Neilson, E.G.; Krensky, A.
Kidney Int. (1992) 41:220-225
Isolation and characterization of cDNA from renal tubular
epithelium encoding murine Rantes: A small intercrine from
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MOI. Cell. Biol. (1994) 14:2914-2925
Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of MuRantes and crg-2.
                                                                                                      #product monocyte chemoattractant protein 1, short form
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Schall, T.J.; Simpson, N.J.; Mak, J.Y.

Bur. J. Immunol. (1992) 22:1477-1481

Molecular cloning and expression of the murine RANTES

cytokine: structural and functional conservation between

mouse and man.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A46539 #type complete monocyte chemoattractant cytokine RANTES precursor - mouse
                                     #domain signal sequence #status predicted #label SIG\
#product monocyte chemoattractant protein 1 #status
experimental #label MAT\
                                                                                                                       *status experimental #label MAT2\
#modified_site pyrrolidone carboxylic acid (Gln) (in mature form) *status experimental\
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                                                                                                                                                                  #formal_name Mus musculus #common_name house mouse 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 22-Jan-1999
                                                                                                                                                                                                                                                                                                                      Gaps
cytokine; glycoprotein; inflammation; pyroglutamic acid
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##molecule_type DNA
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P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G.
#title Biochem. Biophys. Res. Commun. (1997) 231:726-730
#title Human monocyte Chemotactic protein-2: cDNA tloning and regulated expression of mRNA in mesenchymal cells.
#accession JC5295
                                                                                                                                                                                                                                                                                                        #domain signal sequence #status predicted #label SIG\
#product monocyte chemoattractant cytokine RANTES
#status predicted #label MAT
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#product monocyte chemotactic protein-2 #status
predicted #label MAT
#length 99 #molecular-weight 11246 #checksum 6596
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               monocyte chemotactic protein-2 precursor - human #formal_name Homo sapiens #common_name man 02-May-1997 #sequence_revision 18-Jul-1997 #text_change
                                                                                                       ##residues 1-40,'E',42-91 ##label NEI
##cross-references GB:M77747; NID:g200649; PID:g200650
IT This chemoattractant for monocytes but not neutrophils is an immediate-early response protein to LPS stimulation.
                                                                                                                                                                                                                                                                                                                                                                         #molecular-weight 10071 #checksum 3010
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Pred. No. 7.16e-03;
1; Mismatches 3; Indels
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                                                                   translated from GB/EMBL/DDBJ
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the Scy superfamily.
#cross-references MUID:92277990
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similarity 66.7%;
8; Conservative
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Score 71; DB 2; Length 99; Pred. No. 7.16e-03; 2; Mismatches 2; Indels 73 EVCADPKERWVR 84 g ô

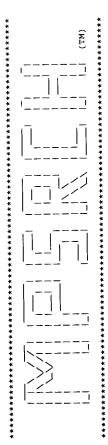
Query Match 78.0%; Best Local Similarity 66.7%; Matches 8; Conservative

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Gaps

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Search completed: Fri Feb 4 17:27:28 2000 Job time : 16 secs.



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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:33:35 2000; MasPar time 2.52 Seconds 134.696 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-44 (1-12) from US09150813.pep 91 1 QVCADPSESWVQ 12 Description: Perfect Score:

Sequence:

Scoring table:

77977 seqs, 28268293 residues PAM 150 Gap 15 Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

swiss-prot37 1:swissprot Database:

Mean 25.122; Variance 33.379; scale 0.753 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	2.87e-08	1.53e-07	4.59e-07	4.59e-07	4.04e-06	2.01e-05	5.79e-05	9.78e-05	1.65e-04	1.65e-04	1.65e-04	2.76e-04	4.63e-04	4.63e-04	4.63e-04	7.72e-04	7.72e-04	7.72e-04	-	-	1.28e-03	Η.	2.13e-03
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ΩI	MI1B_HUMAN	MI1B_RABIT	MI1A_HUMAN	MI10_HUMAN	MI1A_RAT	MI1B_RAT	MCP1_CAVPO	MI1B_MOUSE	MI1A_MOUSE	MCP4 HUMAN	MCP3_HUMAN	MIP4_HUMAN	CCC1_HUMAN	MCP2_PIG	CCC3_HUMAN	MCP1_HUMAN	MCP2_BOVIN	MCP1_CANFA	SISD MOUSE	SISD RAT	MCP2 HUMAN	MCP1_PIG	MI1B_CHICK
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% Query Match Length	100.0	96.7	94.5	94.5	90.1	86.8	84.6	83.5	82.4	82.4	82.4	81.3	80.2	80.2	80.2	79.1	79.1	79.1	78.0	78.0	78.0	78.0	76.9
Score	91	88	86		82	79	77	76	75	7.5	7.5	7.4	73	73	7.3	7.2	7.2	72	7.1	7.7	7.1	7.1	70
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IL8_CANFA	IL8_SHEEP	IL8 PIG	MCP1 RAT	MCP1 MOUSE	MCPB BOVIN	EMF1 CHICK	C10 MOUSE	MCP1 RABIT	EOTA MOUSE	FOTA RAT	MCPA BOVIN	MCP5 MOUSE	TI'N BOUTN	MANUAL WEGG	EOI A BUMBIN	IL8_HUMAN	IL8 CERTO	IL8 MACMU	MIIG MOUSE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STOP	SISD_CAVPO	EOTA_CAVPO
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24	25	26	0 10	000	9 0	U () r	1 0	3 0	0 0	. c	7 4	2 0	3,	38	39	4	7 5	+ C	7 .	43	44	45

ALIGNMENTS

RESULT 1 STANDARD; PRT; 92 AA.	REATED) AST SEQUENCE UPDATE) AST ANNOTATION UPDATE)	INFLAMMATORY PROPRIET 2) (ACT	ACTIVATION GENE-1 PROTEIN) (LAG-1) (HC21) (SMALL INDUCIBLE CYTOKINE A4) (G-26 T LYMPHOCYTE-SECRETED PROTEIN).	SCYA OR MIPLE SCYAL OF LAGI.	HOMO SAFLENS (HUMAN). EUKARYOTA, METAZOA, CHORDATA; VERIEBRATA; MAMMALIA; EUTHERIA;	PRIMATES; CATARRHINI; HOMINIDAE; HOMO. [1]		1	"Identification, cloning, and characterization of an immune		PROC. NATL. ACAD. SCI. U.S.A.		_	ZIPFEL P.F., BALKE J., INVING S.G., NELLY N., SIEDENALTS V., "Withman in and induces two closely related				[3]	MEDITUE: 89093958.	BROWN K.D., ZURAWSKI S.M., MOSMANN T.R., ZURAWSKI G.;				J. IMMUNOL.					Cloning and expression of a lymphocyte activation game (27: 7: 7). MOL. IMMUNOL. 27:1091-1102(1990).		SECONNE PROM N.A.
RES	255	EEE	E E	ZZ	က္လ လ	S S	RP	Z Z	F	RT	Z Z	R P	Ϋ́	RA E	Z E	R	RL	RN C	ች ይ	R	RI	X 0	R	RL	RN	RP	X X	RA	RL	RN	Ž,

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                                                                                                                                                                                                                                                                                                                                                                         LODI P.J., GARRETT D.S., KUSCEWSKI J., TSANG M.L.S., WEATHERBEE J.A., LEGNARD W.J., GRONENBORN A.M., CLORE G.M.; "High-resolution solution structure of the beta chemokine hMIP-1 beta SCIENCE 263:1762-1767(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i- INDUCTION: BY MITOGENS.
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                             The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/Tax
                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
                                                                                                                    SEQUENCE FROM N.A.
MEDLINE; 91373378.
NAPOLITANO_M., MODI W.S., CEVARIO S.J., GNARRA J.R., SEUANEZ H.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
                                             "Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on
                                                                                                                                                                                                                                                                     MEDLINE; 90038522.
MILLER M.D., HATA S., WAAL MALEFYT R., KRANGEL M.S.,
"A novel polypeptide secreted by activated human I lymphocytes.";
J. IMMUNOL. 143:2907-2916(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PFAM; PF00048; i18; 1. - CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.

BY SIMILARITY.

T -> C (IN REF 7).

A -> S (IN REF 6).

P -> L (IN REF 2).

ARKLPR -> REASS (IN REF. 3).
                                                                                                                                                                                               responsiveness of 5' upstream sequences, and chromosomal localization.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                          BIOL. CHEM. 266:17531-17536(1991)
                                                                                        EUR. J. IMMUNOL. 19:1045-1051(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; M23502; G533213; --
EMBL; M25316; G602455; --
EMBL; X53683; G34218; --
EMBL; X53683; G34218; --
EMBL; X16166; G32036; --
EMBL; X16166; G32036; --
EMBL; M69203; G1332376; --
EMBL; M69203; G1332376; --
EMBL; M69201; G1332376; --
EMBL; M57503; G332376; JOINED.
EMBL; M57503; G3332376; JOINED.
EMBL; M57503; G333777; --
PIR; B30574; B30574.
                               CHANG H.C., REINHERZ E.L.;
                                                                                                                                                                                                                                                       SEQUENCE OF 6-92 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -! - SUBUNIT: HOMODIMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1HUM; 30-APR-94.
1HUN; 30-APR-94.
                                                                           human T lymphocytes.
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JH0319; JH0319.
A37411; A37411.
TISSUE=T-CELL;
MEDLINE; 89325421
                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 94182137
LODI P.J. GARRETT
                                                                                                                                                                                                                                                                                                                                               STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  182284;
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DISULFID
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                                                                                                                                                                                                                                                        01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROFEIN 1-BETA PRECURSOR (MIP-1-BETA) (IMMUNE
ACTIVATION PROTEIN 2) (ACT-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BY SIMILARITY).
-1- SUBBNIT: HOMODIMER (BY SIMILARITY).
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY.

MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.

BY SIMILARITY.

BY SIMILARITY.

A629AB2D CRC32;
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                                                                                                                                                                                                                                                                                                                        ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHBRIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó
                                                                                                                                   Score 91; DB 1; Length 92;
Pred. No. 2.87e-08;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 88; DB 1; Lengtu ..., pred. No. 1.53e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                10212 MW; F18E7AFD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
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24 92 M2
34 58 B3
35 74 B3
92 AA; 10066 MW;
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                                                                                                                                             Best Local Similarity 100.0%;
                                                                                                                                                        12; Conservative
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ses 11; Conservative
                                                                                                                                                                                                                                          STANDARD;
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                                                                                                              92 AA;
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P46632;
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HSSP; P13236; 1HUN
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                                                                                                              01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA)
(PONSILLAR LYMPHOCYTE LD78 ALPHA PROTEIN) (GOS19-1 PROTEIN) (SIS-BETA)
(PAT 464.1) (SMALL INDUCIBLE CYTOKINE A3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY: LD78-ALPHA AND -BETA ARE VERY CLOSELY RELATED. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -:- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-:- INDUCTION: BY TPA OR PHA (TPA = 12-0-TETRADECANOYL PHORBOL-13
ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'Three human homologs of a murine gene encoding an inhibitor of stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIFFEL P.F., BALKE J., IRVING S.G., KELLY K., SIEBENLIST U.; "Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAKAO M., NOMIYAMA H., SHIMADA K.; **Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                            OBARU K., FUKUDA M., MAEDA S., SHIMADA K.;
"A cDNA clone used to study mRNA inducible in human tonsillar
lymphocytes by a tumor promoter.";
Jymphocytes by a tumor promoter.";
Jymphocytes W 99:885-894(1986).
                                                                                                                                                                                                                                                                                                                EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BLUM S., FORSDYKE R.E., FORSDYKE D.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOL. CELL. BIOL. 10:3646-3658(1990)
                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         secreted factors.";
J. IMMUNOL. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cell proliferation.";
ONA CELL BIOL. 9:589-602(1990).
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                                                                                              STANDARD;
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                                                                                                                                                                                                                                                                                               HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; A24198; A24198
           1 QVCADPSESWVQ 12
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between the Swiss Institute of Bioinformatics and the EMBL outstation between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
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                            POTENTIAL.
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-AUG-1990 (REL. 15, CREATED)
01-AUG-1990 (REL. 15, LAST SEQUENCE UPDATE)
101-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
TONSILLAR LYMPHOCYTE LD78 BETA PROTEIN PRECURSOR (G0S19-2 PROTEIN)
(PAT 464.2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IRVING S.G., ZIPFEL P.F., BALKE J., MCBRIDE O.W., MORTON C.C., BURD P.R., SIEBENLIST U., KELLY K.;
"Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q.";
NUCLEIC ACIDS RES. 18:3261-3270(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAKAO M., NOMIYAMA H., SHIMADA K.; "Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                      Length 92;
INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                      Score 86; DB 1; Louis Pred. No. 4.59e-07;
                                                                      BY SIMILARITY.
BY SIMILARITY.
C24DD919 CRC32;
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EMBL, D90145; G219908; -..
PIR, B30909 B30908.
PIR, B30412; B30412.
PIR, B35673; B35673.
PIR, S10157; S10157.
MIM; 601395; -. S10157.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       93 AA
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0; M
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DNA CELL BIOL. 9:589-602(1990).
                                                                                                                          10085 MW;
                                                                                                                                                                           94.5%;
                                                                                                                                                                                             Local Similarity 91.7%;
nes 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
  CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                           71 QVCADPSEEWVQ 82
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                                                                                                                          92 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 96183056.

MEDLINE; 96183056.

MARAGAWA H., SHIDATA E., KATO H.;

NAKAGAWA H., SHIDATA S., TAKANO K., SHIBATA F., KATO H.;

NAKAGAWA H., SHIDTA S., TAKANO K., SHIBATA F., KATO H.;

NAKAGAWA H., SHIDTA S., TAKANO K., SHIBATA F., KATO H.;

TOYLOKine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel

To the control of t
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-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SHI M. M., GODLESKI J.J., PAULAUSKIS J.D.,
"Molecular cloning and posttranscriptional regulation of macrophage
inflammatory protein-1 alpha in alveolar macrophages.";
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-LONG EVANS; TISSUE-LUNG;
MEDLINE; 952389M.
SHANLEY T.P., SCHMAL. H., FRIEDL H.P., JONES M.L., WARD P.A.;
"Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats.";
J. IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                            LD78 BETA / G0S19-2 / 464.2.
                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                               Length 93;
                                                                                                                                                                                                                                            Score 86; DB 1; L. Pred. No. 4.59e-07;
                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
21EDDB04 CRC32;
                                                                                                                                                                                                                                                                                             0; Mismatches
                                                   CYTOKINE; CHEMOTAXIS; SIGNAL.
                                                                                                                                                                                   93 AA; 10161 MW;
                                                                                                                                                                                                                                       Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
STRAIN=CD-1; TISSUE=LUNG;
MEDLINE; 95298037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C-C) (CHEMOKINE CC).
                                                                                 23
93
74
PFAM; PF00048; i18; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                         1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                           72 QVCADPSEEWVQ 83
                                                                                                                                                                                                                                                                  Local Similarity
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34
35
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                                                                                                                               DISULFID
DISULFID
                                                                                                                                                                                   SEQUENCE
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                                                                                                                                                                                                                                       Query Match
                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                          Matches
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  DR KW KW ETT FT FT SO
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                                                                                                                                                                                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
BY SIMILARITY.
BY SIMILARITY.
                                                                     CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY.
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                         01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-0CT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA).
                                                                                                                                                                                                           .;
0
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EURARXOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                Score 82; DB 1; Length 92;
Pred. No. 4.04e-06;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 2.01e-05;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 79; DB 1; Length 92;
                                                                                                                                  A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3C82B006 CRC32;
                                                                                                                                                                                                                                                                                                       92 AA.
                                  PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1. HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                       PRT;
                                                                                            92
57
57
73
6
6
57
10335 MW;
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92 N
58 B
74 B
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75.0%;
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Conservative
           EMBL; U22414; G790633; -. EMBL; U06435; G459150; -.
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-C) (CHEMOKINE CC).
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| QVCADPŚESWVQ 12
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                                                                                                                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                        92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                           SCYA4 OR MIP1B.
                                                                                                                                                                                                                                                                                        LT 6
MI1B_RAT
P50230;
                                                                                                                                CONFLICT
                                                                                                          DISULFID
                                                                                                                      DISULFID
                                                                                                                                                        SEQUENCE
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                                                                                    SIGNAL
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                                                                                               CHAIN
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US-09-150-813-44.rsp

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10168 MW;
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72.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 QICANPSEPWV 82
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Best Local Similarity
                                                                                                               SEQUENCE FROM N.A. MEDLINE; 89093958.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CONFLICT
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RRARRER RRARRE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                            -i- SUBUNIT: MONONER OR HOMODIMER: IN EQUILIBRIUM (BY SIMILARITY).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1998 (REL. 33, LAST SEQUENCE UPDÀTE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (H400 PROTEIN) (SIS-GAMMA) (ACT2).
SCYA4 OR MIP1B.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZA.
                                                                                                                                                                                                                                                                                                                               "cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein."; J. IMMUNOL. 150:5025-5032(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SHERRY B., TEKAMP-OLSON P., GALLEGOS C., BAUER D., DAVATELIS G.,
                                                                                                                                                                                                                                                                                                                                                                                             -! - FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS
                                                                                                                                                                                               EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BX
                                                                              01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 5.79e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22FAD257 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
                        120 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; L04985; G349821; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13741 MW;
                                                               CREATED)
                                                                                                                                                                SCYA2 OR MCP1.
CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84.6%;
66.7%;
                                                                                                                                            CHEMOATTRACTANT PROTEIN-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8; Conservative
                                                                                                                                                                                                                                                                                STRAIN=Z; TISSUE=SPLEEN; MEDLINE; 93267104.
                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE; CHEMOTAXIS; SIGNAL 1 2:
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                                                                  01-NOV-1995 (REL. 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33
34
97
120 AA;
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                                                                                                                                                                                                                                               [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                   YOSHIMURA T
                          MCP1_CAVPO
008782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
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P10855; P14096;
01-JUL-1989 (REL. 11, CREATED)
01-JUL-1989 (REL. 14, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA) (TY-5)
GSIS-ALPHA) (HEPARIN-BINDING CHEMOTAXIS PROTEIN) (L2G25B).
GSTA3 OR MIPLA.
MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -:- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-:- SUBONIT: HOMODIMER (BY SIMILARITY).
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
WOLPE S.D., MASIARZ F., COIT D., CERAMI A.;
"Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.";
J. EXP. MED. 168:2251-2259(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MACROPHAGE INFLAMMATORY PROTEIN 1-BETA
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                                                                                                                                                                                                                                                                                         BROWN K.D., ZURAWSKI S.M., MOSMANN T.R., ZURAWSKI G.;
"A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.";
J. IMMUNOL. 142:679-687(1989).
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0
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STRAIN-DBA/2J; TISSUE-LIVER;
DAUBERSIES P., LEPRETRE F., BAILLEUL B., GROVE M., PRAGNELL I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 76; DB 1; Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBMITTED (OCT-1991) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A -> P (IN REF. 1).
E -> Q (IN REF. 1).
D -> H (IN REF. 1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C543B91F CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Mismatches
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BY SIMILARITY
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EMBL, M35590; G199697; -.
EMBL, X62502; G53127; -.
PIR; C30552; C30552.
PIR; JL0088; JL0088.
MGI:98651; SCXA4.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- TISSUE SPECIFICITY: EXPRESSED IN LUNG, SPLEEN, AND PANCHEAS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WOLPE S.D., DAVATELIS G., SHERRY B., BEUTLER B., HESSE D.G.,
NGUYEN H.T., MOLDAWER L.L., NATHAN C.F., LOWRY S.F., CERAMI A.;
"MACTOPhages secrete a novel heparin-binding protein with
inflammatory and neutrophil chemokinetic properties.";
J. EXP. MED. 16:570-581(1988).
-!- FUNCTION: MONOKINE WITH INFLAMMATORY, PYROGENIC AND CHEMOKINETIC
PROPERTIES. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Genomic structure of murine macrophage inflammatory protein-1 alpha and conservation of potential regulatory sequences with a human
                                                                                                                                                                                                                                                                                                                                                                                                                       GROVE M., LOWE S., GRAHAM G., PRAGNELL I., PLUMB M.; "Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein I alpha gene."; NUCLEIC ACIDS RES. 18:5561-5561(1990).
                                          DAVATELIS G., TEKAMP-OLSON P., WOLPE S.D., HERMSEN K., LUEDKE C., GALLEGOS C., COIT D., MERRYWEATHER J., CERAMI A., "Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.";

J. EXP. MED. 167:1939-1944(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=BALB/CJ, DBA/2J, NOD/LTJ, SJL/J, AND B10.S/J; TISSUE=SPLEEN;
                                                                                                                                                                                                                                                               BROWN K.D., ZURAWSKI S.M., MOSMANN T.R., ZURAWSKI G.,
"A family of small inducible proteins secreted by leukocytes are
members of a new superfamily that includes leukocyte and
fibroblast-derived inflammatory agents, growth factors, and
indicators of various activation processes.";
J. IMMUNOL. 142:679-687(1989).
                                                                                                                                                                      DAVATELIS G., TEKAMP-OLSON P., WOLPE S.D., HERMSEN K., LUEDKE GALLEGOS C., COIT D., MERRYWEATHER J., CERAMI A.;
J. EXP. MED. 170:2189-2189(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 91237116.
WIDMER U., YANG Z., VAN DEVENTER S., MANOGUE K.R., SHERRY B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MA R.Z., TEUSCHER C.;
SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "cDNA sequences of two inducible T-cell genes.";
PROC. NATL. ACAD. SCI. U.S.A. 86:1963-1967(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMUNOL. 146:4031-4040(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KWON B.S., WEISSMAN S.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C-C) (CHEMOKINE CC).
[1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 91016858.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 91237116.
                                 MEDLINE; 88258380.
                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE; 89093958.
                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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MEDLINE; 88154745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89184547
                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-DBA/2J;
                                                                                                                                                         REVISIONS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N.,
LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;
"Human moncoyte chemoattractant protein (MCP)-4 is a novel CC
chemokine with activities on moncoytes, eosinophils, and basophils
induced in allergic and nonallergic inflammation that signals through
the CC chemokine receptors (CCR)-2 and -3.";
IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                       MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 75; DB 1; Length 92; Pred. No. 1.65e-04;
                                                                                                                                                                                                                                                                                                                                       INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.

BY SIMILARITY.

F -> L (IN REF. 3).

V -> A (IN REF. 3).

53979E5E CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                     PIR; A32393; A32393.
PIR; S04533; PA6533.
PIR; S01685, S11685.
MGD; MGI:98260; SCYA3.
MGD; MGI:98260; SCYA3.
PSCOITE; PS00472; SMALL_CYTOKINES_CC; 1.
HSSP; P13236, 1HUN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. EXP. MED. 183:2379-2384(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  10345 MW;
                                      EMBL; X12531; G53123; --
EMBL; X53372; G297531; --
EMBL; J04491; G201525; --
EMBL; M73061; G199695; --
EMBL; AF065939; G3158440; --
EMBL; AF065940; G3158440; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 larity 66.7%;
Conservative
                                                                                                                            G3158442;
G3158444;
                                                                                                                                                          AF065942; G3158446;
AF065943; G3158448;
                              EMBL; M23447; G533241; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                     CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 OVCADPSESWVQ 12
                                                                                                                                                                                        PIR; A27596; A27596
PIR; A30552; A30552
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                 92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71 QICADSKETWVQ
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                                                                                                                                         AF065941;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-HEART
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCP4_HUMAN
Q99616;
                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                CONFLICT
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                                                                                                                                                                                                                                                                                                                                                    SIGNAL
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                                                                                                                                                        EMBL;
EMBL;
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MCP3_HUMAN
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ID MC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND TWO FUNDGLAID SIGNAL CLEAVAGE. FURPOGLA)MCP-4 RE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE. (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POWER C.A., MEYER A., RISON S.C.G., GUVE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BARKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
--BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MASS SPECTROMETRY: MW-9314; MW_ERR-30; METHOD-MALDI; RANGE-17-98.
MASS SPECTROMETRY: MW-8760; MW_ERR-30; METHOD-MALDI; RANGE=22-98.
MASS SPECTROMETRY: MW-8575; MW_ERR-30; METHOD-MALDI; RANGE=24-98.
INDUCTION: BY INTERLEDENT EXPRESSED. FOUND IN SMALL INTESTINE;
TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE;
SEEN IN THE PULMOY, TRACHER, STOWACH AND LYMPH NODE. LOW LEVELS
SEEN IN THE PULMOYARY RATERY SMOOTH MUSCLE CELLS.
                  MEDLINE; 97341179.

MEDLINE; 97341179.

APPELBAUM E., REAPL H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., FEAPL T.J., BRANNER M., MAKWANA J., FOLEY J.J.,

SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'TONNELL K.,

O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.;

COOLING, IN VIETO expression, and functional characterization of a novel human CC chemoKine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemoKine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
DF52F6EC CRC32;
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                                                                                                                                                                                                                                                                                                                                      J. BIOL. CHEM. 272:16404-16413(1997).
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58
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758
10986 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-C) (CHEMOKINE CC).
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HSSP; P13500; 1DOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
TISSUE-FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MIM; 601391;
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Gaps

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2; Indels

2; Mismatches

8; Conservative

Matches

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This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VAN DAMME J., PROOST P., LENAERTS J.-P., OPDENAKKER G.; "Structural and functional identification of two human, tumor-derived monocyte chemotactic proteins (MCP-2 and MCP-3) belonging to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- PTM: O-GLYCOSYLATED.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SHIRE D., FERRARA P., CAPUT D.; "Molecular cloning of the MCP-3 chemokine gene and regulation of its expression.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.; "Determination of the three-dimensional structure of CC chemokine monocyte chemoattractant protein 3 by 1H two-dimensional NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOCHEMISTER 36:4412-4422(1997).

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                               OPDENAKKER G., FITEN P., NYS G., FROYEN G., VAN ROY N., SPELEMAN F.,
                                                                                                                                                                                                                                                    OPDENAKKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; OPDENAKKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; thuman monocyte chemotactic protein-3 (MCP-3): molecular cloning of the CDM and comparison with other chemokines."; BIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 97053697.
KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
"Structural characterization of a monomeric chemokine: monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MINTY A., CHALON P., GUILLEMOT J.C., KAGHAD M., LIAUZUN P., MAGAZIN M., MILOUX B., MINTY C., RAMOND P., VITA N., LUPKER J.,
                                                                                                                                                                                                                                                                                                                                                                                                                 "The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                           EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                   01-DEC-1992 (REL. 24, CREATED)
1-ONO-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE
                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-99.
99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUR. CYTOKINE NETW. 4:99-110(1993).
 PRT;
                                                                                                           CHEMOATIRACTANT PROTEIN 3) (NC28).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRUCTURE BY NMR, AND SUBUNIT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chemokine family.";
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chemoattractant protein-3.";
FEBS LETT. 395:277-282(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                      LAUREYS G., VAN DAMME J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C-C) (CHEMOKINE CC).
   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=OSTEOSARCOMA;
MEDLINE; 92308855.
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                                                                                                                                                 (HUMAN)
                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE; 94375065.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE; 93305913.
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                                                                                                                                                                                                                                        93213290
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                                                                                                                              SCYA7 OR MCP3
                                                                                                                                                 HOMO SAPIENS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KODELJA V., MUELLER C., POLITZ O., HAKIY N., ORFANOS C.E., GOERDT S.; SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1997 (REL. 35, CREATED)
10-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND
ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE
SCHANG OR MIP4.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
MEDLINE; 97376836.
MEDLINE; 97376836.
MINAI T., EABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., IWAI T., EABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MIURA R., OPEDNAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.;
A novel human CC chemokine PARC that is most homologous to
macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic
for T lymphocytes, but not for monocytes.";
J. IMMUNOL. 159:1140-1149(1997).
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                           PFAM; PF00048; i18; 1. CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                               MONOCYTE CHEMOTACTIC PROTEIN 3.
                                                                                                                                                                                                                                                                                                                                                                              PYRROLIDONE CARBOXYLIC ACID.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 1.65e-04;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                             T -> K (IN REF. 4).
MISSING (IN REF. 4).
7502E19C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Macrophage inflammatory protein-3 and -4."; PATENT NUMBER US5504003, 02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89 AA.
                                                                                                                                                                                                                                                                             PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                              POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 75;
                                                                                                                             EMBL; X72309; F. NOT_ANNOTATEL_CDS.
EMBL; X1087; G288399; F.
EMBL; X71087; G288399; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
PIR; S32222; S32222
PIR; S32222; S32222
PIR; A54678; A54678.
MM: 158106; ---
MM: 158106; ---
PROSITE: PS00472; SMALL_CYTOKINES_CC;
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                                                                                                               EMBL; X72308; G313708; ALT_INIT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LI H., RUBEN S.;
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                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACROPHAGE INFLAMMATORY PROTEIN 4.
BY SIMILARITY.
BY SIMILARITY.
052AA3DC CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 74; DB 1; Length 89; Pred. No. 2.76e-04; "...matches 2; Indels
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                                            MEDLINE, 97275308.
WELLS T.N.C., PEITSCH M.C.;
"The chemokine information source: identification and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
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TISSUE-BONE MARROW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHEMOKINE CC-1 PRECURSOR (HCC-1) (NCC-2). SCYA14 OR NCC2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PS00472; SMALL_CYTOKINES_CC; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA; CHORDATA; VERTEBRA PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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66.7%;
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                   DISCUSSION OF SEQUENCE.
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HSSP; P13236; 1HUN.
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Best Local Similarity
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TISSUE=LIVER;
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Q16627;
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-i - SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                    DISULFID
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                                                                                                                                                                                                                                                                                                                       Query Match
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-:- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN CAN BIND HEPARIN.
                                                                                    SUBMITTED (OCT 1995) TO EMBL/GENBANK/DDBJ DATA BANKS.
SUBMITTED (OCT 1995) TO EMBL/GENBANK/DDBJ DATA BANKS.

-!- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHAN IT INDUCED INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS, AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE PROLIFERATION OF CD34 WYELOID PROCENTIOR CELLS.

-!- TISSUES PREDEITIVITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL TISSUES. SPLEEN, LIYER, SKELETAL AND HEART MUSCLE, GUT, AND BONE MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.

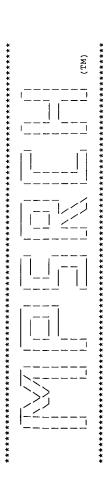
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -!- SUBGNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
                                                              PARDIGOL A., MAEGERT H.-J., CIESLAK A., HILL O., SCHULZ-KNAPPE P., FORSSMANN W.-G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., WUTTKE W.W., SCHEIT K.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUKARYOTA; METAŽOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 93;
              SUBMITTED (MAY-1996) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 4.63e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 73; DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A3E7BCAD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHEMOKINE CC-1.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10678 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 80.2%;
Local Similarity 63.6%;
les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                 EMBL; Z49270; G1004269; -.
EMBL; Z70292; E233856; -.
                                                                                                                                                                                                                                                                                                                                                                                              Z49269; G1004267; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                      C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                 PFAM; PF00048; 118; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 VCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74 VCTNPSDKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 95091716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SCROFA (PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; SIGNAL.
                                                          TISSUE-PLACENTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP2_PIG
P49873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (MAY-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                  CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE. SIGNAL 1 23 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                     MONOCYTE CHEMOTACTIC PROTEIN 2. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PARDIGOL A., MAEGERT H.-J., ZUCHT H.D., FORSSMANN W.-G., SCHULZ-KNAPPE P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 73; DB 1; L
Pred. No. 4.63e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY.
BY SIMILARITY.
9AE90F93 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 73; DB 1; Le
Pred. No. 4.63e-04;
2; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARÍTY.
BY SIMILARITY.
B7620BCF CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            POTENTIAL.
CHEMOKINE CC-3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                               PROSITE; PSÖ0472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1. HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIMATES; CATARRHINI; HOMINIDAE; HOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 ? PO
? 109 CH
51 75 BX
52 91 BX
109 AA; 12297 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99 AA; 10903 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; Z70293; E233858; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                             EMBL; Z48480; G683719; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PFAM; PF00048; i18; 1.
HSSP; P13236; 1HUN.
CYTOKINE; SIGNAL.
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 OVCADPSESWVO 12
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 EVCADPOOKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCC3_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
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US-09-150-813-44.rsp

7; Conservative 3; Mismatches 1; Indels 0; Gaps 0; 90 VCINPSDKWVQ 100 ||::||: ||| 2 VCADPSESWVQ 12 Matches Οy

Search completed: Fri Feb 4 17:33:42 2000 Job time: 7 secs.



Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Fri Feb 4 17:32:46 2000; MasPar time 3.59 Seconds 133.926 Million cell updates/sec

Tabular output not generated.

Title: >US-09-150-813-44
Description: (1-12) from US09150813.pep
Perfect Score: 91

Sequence: 1 QVCADPSESWVQ 12

Scoring table: PAM 150 Gap 15 Searched: 122810 seqs, 40068593 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

LISCIIIG IIISC

Database: pir60 1:pir1 2:pir2 3:pir3 4:pir4

Statistics: Mean 24.455; Variance 36.695; scale 0.666

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	% Query Match Length D	DB	ID	Description	Pred. No.
100.0 50	0	N	C60407	monocyte adherence-in	4.73e-07
100.0 92		Н	A31767	macrophage inflammato	4.73e-07
7		7	146730	immune activation gen	2.11e-06
		7	A30574	macrophage inflammato	5.68e-06
94.5 93		7	B35673	LD78-beta protein pre	5.68e-06
90.1 92		~	152322	macrophage inflammato	4.01e-05
84.6 120		7	148147	monocyte chemoattract	4.39e-04
'n.		7	C30552	macrophage inflammato	7.04e-04
82.4 92		7	A32393	macrophage inflammato	1.13e - 03
4.		7	A54678	monocyte chemotactic	1.13e-03
81.3 120		~	JE0177	lymphocyte and monocy	1.80e-03
~		7	JC2417	monocyte chemoattract	2.85e-03
_		7	A60299	monocyte chemoattract	4.53e-03
0		Н	A46539	monocyte chemoattract	7.16e-03
0		7	JC5295	monocyte chemotactic	7.16e-03
0		7	JC2136	monocyte chemoattract	7.16e-03
0		~	JN0841	interleukin-8 - dog	1.13e-02
6		7	146997	interleukin-8 - sheep	1.13e-02
76.9 101		7	S42496	interleukin 8 - sheep	1.13e-02
0		7	A53096	interleukin-8 precurs	1.13e-02
σ,		7	A44253	alveolar macrophage c	1.13e-02
76.9 148		7	A30209	PDGF-inducible JE gly	1.13e-02
0		7	S07723	immediate-early serum	1.13e-02

#19767 #type complete
macrophage inflammatory protein 1-beta precursor - human
cytokine Hc21, G-26 protein; H400 homolog, lymphocyte
activation gene 1 protein (LAG-1); MIP-1beta; pAT744; SCYA2
protein (misidentification); SIS gamma homolog; T-cell
activation protein 2 (Act-2); T-cell activation protein

TITLE ALTERNATE_NAMES

RESULT ENTRY JH0319
Balkeras, E.; Roman-Roman, S.; Jitsukawa, S.; Genevee, C.;
Wechiche, S.; Viegas-Pequignot, E.; Hercend, T.; Triebel,
F.

ACCESSIONS REFERENCE #authors

#formal_name Homo sapiens #common_name man 07-Jnu-1990 #sequence_revision 29-May-1998 #text_change 28-May-1998 JH0319; A40978; A31767; A37411; B30574; B45817; D30552

gamma

ORGANISM DATE

transformation-induce	gene C10 protein - mo 1.	monocyte chemoattract 1.	monocyte chemoattract 2	eotaxin precursor - h 6	interleukin-8 precurs 6.	eotaxin precursor - r 1	eotaxin precursor - g 1	interleukin-8 - rabbi l	interleukin-8 homolog 2	pre-B-cell growth-sti 2	cytokine - mouse 2	Cytokine SDF-1-Deta - 2.	lymphotactin precurso 1.	23 lrp protein - human 2.	protein 3.	ALIGNMENTS	fragment	induced protein 5 beta - human (fragment)	#common_name man sion 06-Nov-1992 #text_c			n, D.F.; Johnson, C.E.; Morris, J.;	daskiii, s. -4441	nce results in selective induction of novel homology with mediators of inflammation and			not compared with conceptual translation	OdS	hage inflammatory protein um 9927		74, 738-07, 1738-0708-07, 1738-07, 1738-07, 1738-07, 1738-07, 1738-07, 1738-07, 1738	Mismacches U; inders U; daps		
9 75.8 103 2	9 75.8 116 2 1495	9 75.8 125 2	8 74.7 99 2	6 72.5 97 2	5 72.5 99 2	5 71.4 96 2	5 71.4 96 2	70.3 101 2	3 69.2 89 2	3 69.2 89 2	3 69.2 93 2	3 69.2 93 2	9 64.8 114 1	8 63.7 896 2 5577	.6 529 2 C705 6 761 2 1057	ALIGN	1 C60407 #tvpe fra	e adhe	#formal_name Homo sapiens 06-Nov-1992 #sequence_revi	03-May-199	C60407 A60407	s Sporn, S.A.;	Martin, G. J. Immunol.	Monocyte adh qenes shar	tissue repair	įΰ	s preliminary;	label	#superfamily macro	100 08	al Similarity 100.0%; Pred.	vactve	QVCADPSESWVQ 41	QVCADPSESWVQ 12
22 24	120	27/	29	30	31 32	3 E	34	35	37	38	σe τ	0 4 6	4 4 2	43	4 4 4 7.		RESULT	TITLE	ORGANISM DATE		REFERENCE	#authors	#journal	#title	********	#accession	##St?	OE # #	CLASSIFICATION SUMMARY	Mark Mar	Best Local	Marches	Dp 30 (Qy 1 (

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Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. (1989) 142:679-687
A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #authors Chang, H.C.; Reinherz, E.L.
#journal Eur. J. Immunol. (1989) 19:1045-1051
#title Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2 structure on human T lymphocytes.
#cross-references MUID:89325421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist,
                                                                                                                                                  ##residues 1-92 ##label BAI ##cross-references GB:X53682; NID:g34217; PID:g34218 ##experimental_source natural killer cell, strain CD3-CD2+, F5, 5IIIE5 NNCE A40978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #journal Proc. Natl. Acad. Sci. U.S.A. (1988) 85:9704-9708
#title Identification, cloning, and characterization of an immune activation gene.
#cross-references MUID:89071764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      J. Immunol. (1989) 142:1582-1590
Mitogenic activation of human T cells induces two closely
related genes which share structural similarities with a
new family of secreted factors.
                                                                                                                                                                                                                                                                                Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.; Seuanez, H.N.; Leonard, W.J.
J. Biol. Chem. (1991) 266:17531-17536
The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsiveness of 5' upstream sequences, and chromosomal localization.
Mol. Immunol. (1990) 27:1091-1102
Cloning and expression of a lymphocyte activation gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S. J. Immunol. (1989) 143:2907-2916
A novel polypeptide secreted by activated human T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##residues 1-19,'L',21-92 ##label ZIP
##cross-references GB:M25316; NID:g602454; PID:g602455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ##molecule_type mRNA
##residues 7-55,'I',57-79,'I',81-92 ##label MIL
##cross-references GB:M57503; NID:9339726; PID:9339727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #cross-references GB:J04130; NID:g178017; PID:g178018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ##cross-references GB:X16166; NID:g32035; PID:g32036
                                                                                                                             translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ##molecule_type mRNA
##residues 1-92 ##label LIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1-92 ##label CHA
                                                                          #cross-references MUID:91061800
                                                                                                                                                                                                                                                                                                                                                                                                                                     #cross-references MUID:91373378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #cross-references MUID:90038522
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ts annotation; conformation and disulfide bond assignments by (1)H-NMR, residues 24-92
This protein is secreted by activated lymphocytes and monocytes. It is bound by chemokine (C-C) receptor 5 (see PIR:A43113) and receptor 1 (see PIR:A45177).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
#disulfide_bonds #status experimental
#length 92 #molecular-weight 10212 #checksum 7597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #title Dynamic changes in mRNA expression of neutrophils during the course of acute inflammation in rabbits.
#cross-references MUID:94198229
                                                                                                                                      #authors Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M.
#submission submitted to the Brookhaven Protein Data Bank, January 1994
#cross-references PDB:1HUM
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FICATION #superfamily macrophage inflammatory protein
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Pred. No. 4.73e-07;
0; Mismatches 0;
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1; Mismatches 0
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Mol. Cell. Biol. (1990) 10:3646-3658
Structures of human genes coding for cytokine LD78 and their
                                                                                                                                                                                                                                                                                                      Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.; Siebenlist,
LD78-alpha protein precursor; lymphocyte tumor promoter-induced protein; macrophage inflammatory protein homolog GOS19-1; MIP-lalpha; pAT464; small inducible cytokine A3; T-cell activation protein 1
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#product macrophage inflammatory protein 1-alpha #status
predicted #label MAT\
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J. Biochem. (1986) 99:885-894
A cDNA clone used to study mRNA inducible in human tonsillar
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#title Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a cross_references MUID:891403487
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##cross-references GB:D90144; NID:g219905; PID:d1014875; PID:g219906
                                                               #formal_name Homo sapiens #common_name man
03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
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NSSIFICATION #Superfamily macrophage inflammatory protein
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A35673; A30574; A30412; A24198; A30908
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Nakao, M.; Nomiyama, H.; Shimada, K.
Mol. Cell. Biol. (1990) 10:3646-3658
Structures of human genes coding for cytokine LD78 and their
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C.C.; Burd, P.R.; Siebenlist, U.; Kelly, K.
#journal Nucleic Acids Res. (1990) 18:3261-3270
Two inflammatory mediator cytckine genes are closely linked and variably amplified on chromosome 17q.
#cross-references MUID:90287702
#accession 510157
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This protein is a member of a "small inducible" or "activation specific" gene family, is likely to be an early-acting interleukin, and is the product of a putative G0/G1 switch gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #authors Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
#iournal DNA Cell Biol. (1990) 9:589-602
#title Three human homologs of a murine gene encoding an inhibitor of stem cell proliferation.
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#product LD78-beta protein #status predicted #label MAT
#length 93 #molecular-weight 10161 #checksum 7784
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                                                                                                                                                                                                                                                                                                                                                                                                                       inducible cytokine A4 #formal_name_cytokine A4 #formal_name Homo sapiens #common_name man 28-Sep-1990 #sequence_revision 28-Sep-1990 #text_change 24-Sep-1998
macrophage inflammatory protein homolog GOS19-2; small
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##cross-references GB:M24110; GB:M32338; NID:9182848; PID:9182849
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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Pred. No. 5.68e-06;
0; Mismatches 1; Indels
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Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
                                                                                                                                        B35673; B30412; S10157; B30908
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Local Similarity 91.7%;
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##cross-references GB:M23503; NID:9533244; PID:9533245
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#fille J. Immunol. (1989) 142:679-687
#fille Are members of a new superifamily that includes leukocytes and members of a new superifamily that includes leukocytes and indicators of a new superifamily that includes leukocytes and indicators of various activation processes.
#cross-references MUD:89093958
#accession C30552
#molecule_type mRNA
##residues 1-92 ##label BRO
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monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
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                   Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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##cross-references EMBL:U22414; niD:9790632; PID:9790633
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#length 120 #molecular-weight 13741 #check
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##cross-references GB:L04985; NID:9349820; PID:9349821
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2; Mismatches 1,
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J. Immunol. (1993) 150:5025-5032
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                                                                                                            #cross-references MUID:95298037
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#journal J. Exp. Med. (1988) 168:2251-2259
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
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#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
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macrophage inflammatory protein-1-alpha precursor - mouse
heparin-binding chemotaxis protein; L2G25B protein;
heparin-binding chemotaxis protein; L2G25B protein;
SCI/MIP-la; SIS alpha; stem cell inhibitor/macrophage
inflammatory protein 1-alpha; T-cell activation protein
             Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.;
Davatelis, G.; Wolpe, S.D.; Maslarz, F.; Colt, D.; Cerami,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #authors Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M. #journal Nucleic Acids Res. (1990) 18:5561
#title Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein 1-alpha gene. #cross-references MUID:91016858
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                                                                                                                                                                                                                                                               ##residues 1-92 ##label SHE ##cross-references GB:M35590; NID:g199696; PID:g199697
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Pred. No. 7.04e-04;
3; Mismatches 0;
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##residues 1-92 ##label DAU
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Local Similarity 72.7%;
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#authors Brown, R.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
#journal J. Immunol. (1989) 142:679-687
A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocytes and fibroblast-derived inflammatory agents, growth factors, #cross-references MUID:89083958 to various activation processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #journal J. Exp. Med. (1988) 168:2251-2259
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
                                                                                                                                                                                                                                                                                                                         J. Exp. Med. (1988) 167:1939-1944
Cloning and characterization of a cDNA for murine macrophage
differs at several positions from the sequence given
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the authors translated the codon GAG for residue 49 as
Asp and ATT for residue 91 as Asn
the Sequence has been corrected in reference A53885
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Davatelis, G.; Wolpe, S.D.; Masiarz, F.; Coit, D.; Cerami,
                                                                                                                                                                                                                                                          Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.;
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Luedke, C.; Gallegos, C.; Colt, D.; Merryweather, J.;
Cerami, A.
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                                                                                                                                                                                                                                                                                      Luedke, C.; Gallegos, C.; Coit, D.; Merryweather, J.;
Cerami, A.
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#title Macrophages secrete a novel heparin-binding protein with
inflammatory and neutrophil chemokinetic properties.
#accession A27596
                                                                                                                                                                                                                                                                                                                                                                                inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties. #cross.references MUID:88258380 #accession $604533
                                          #authors Kwon, B.S.; Weissman, S.M.
#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
#title CDNA sequence of two inducible T-cell genes.
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#cross-references GB:J04491; NID:9201524; PID:9201525
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Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408

The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #authors Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. aubmitted to the EMBL Data Library, March 1993
#description Molecular cloning of MCP-3: a human monocyte-derived monocyte
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#authors Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, K.R.;
Sherry, B.; Cerami, A.

"journal J. Immunol. (1991) 146:4031-4040

#title Genomic structure of murine macrophage inflammatory
protein-1-alpha and conservation of potential regulatory
sequences with a human homolog, LD78.
                                                                                                                                                                                                                                                                                                                                                                                                           #domain signal sequence #status predicted #label SIG\
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Human monocyte chemotactic protein-3 (MCP-3): Molecular
cloning of the CDNA and comparison with other chemokines.
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experimental #label MAT
th 92 #molecular-weight 10345 #checksum 5009
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Pred. No. 1.13e-03;
3; Mismatches 1; Indels
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##residues 1-109 ##label MIN
##cross-references EMBL:X71087; NID:9288396; PID:9288397
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#cross-references MUID:94375065
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Local Similarity 66.7%;
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Blochen. Blophys. Res. Commun. (1998) 247:217-222
Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with
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lymphocyte and monocyte chemoattractant CC chemokine - human
#formal_name Homo sapiens #common_name man
10-Jul-1998 #sequence_revision 10-Jul-1998 #text_change
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Scheit, K.H.
Scheit, R.H.
Scheit, Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by CDNA cloning and northern
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#length 109 #molecular-weight 12356 #checksum 1535
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82.4%; Score 75; DB 2; Length 109; 58.3%; Pred. No. 1.13e-03; arive 4; Mismatches 1; Indels
                                                                                                                                                                                                                                           *superfamily macrophage inflammatory protein cytokine; glycoprotein; inflammation
                                                                                                myelosuppressive activity.
#cross-references MUID:98308096
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#accession JC24177
##molecule_type MRNA
##residues 1-99 ##label HOS
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                                                 macrophages and monocytes.
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Matches 7; Conservative
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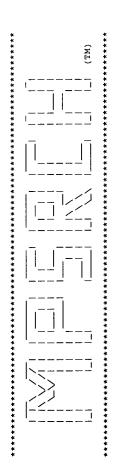
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#authors Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
#journal FEBS Lett. (1989) 244.487-493
#title Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood monounclear leukocytes, and sequence similarity to mouse competence gene JE.
#accession S03339
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The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
#journal Blochem. Blophys. Res. Commun. (1990) 169:346-351
#title Structure of human monocyte chemotactic protein gene and its regulation by TPA.
#cross-references MUID:90290466
#accession A35474
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                monocyte chemoattractant protein 1 precursor - human monocyte chemoattractant protein 1 mCAF; GCCF-1; glioma-derived monocyte chemotactic factor 1; monocyte secretory protein; tumor-derived chemotactic factor protein; tumor-derived chemotactic factor glioma-derived chemotactic factor 2 (GDCF-2) #formal_name Homo sapiens #common_name man 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change
                                                                          #domain signal sequence #status predicted #label SIGN #product monocyte chemoattractant protein-2 #status predicted #label MAT #length 99 #molecular-weight 10903 #checksum 7556
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A34561; I57488; JC1096
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PID:9386961
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#cross-references WUD:92095166
#accession 151841
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##molecule_type mRNA
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                                                                                                                                                                                                                         Score 73; DB 2; Length 99;
Pred. No. 2.85e-03;
2; Mismatches 2; Indels
##experimental_source corpus luteum
IFICATION #superfamily macrophage inflammatory protein
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Adv. Exp. Med. Biol. (1991) 305:47-56
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##residues 1-99 ##label ROL
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##residues 1-99 ##label SHY
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Best Local Similarity 66.7%;
Matches 8; Conservative
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Int. J. Cancer (1990) 45:795-797
A chemoattractant expressed in human sarcoma cells
(tumor-derived chemotactic factor, TDCF) is identical to
monocyte chemoattractant protein-1/monocyte chemotactic and
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#title Blochem Biophys. Res. Commun. (1990) 167:904-909
Gentification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel #cross-references MUID:90211336
#accession A34561
                                                                       Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani,
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Mol. Cell. Biochem. (1993) 126:61-68
The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
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Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte
chemoattractant protein-1 (MCP-1) gene.
                                                                                                                                                                                                                                                                                 not compared with conceptual translation
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                     ##cross-references GB:S71513; NID:9240867; PID:9240868
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflammatory protein
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NCE JC1096
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##residues 29-33,'XX',36-52;82-92 ##label DEC
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##residues 24-28,'Q',30-99 ##label YEQ
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##residues 'X',25-99 ##label ROB
  1-99 ##label YO2
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##residues 1-99 ##label LIY
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#accession 157488
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#authors Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher, S.N.; Paznekas, W.A.
#journal Moll. Cell. Biol. (1994) 14:2914-2925
#title Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of MuRantes and crg-2.
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Kidney Int. (1992) 41:220-225
Isolation and characterization of cDNA from renal tubular
epithelium encoding murine Rantes: A small intercrine from
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#journal J. Immunol. (1994) 152:1182-1189
#title Cloning, genomic organization, and chromosomal localization
#cross-references MUID:94132613
#accession 148875
                                               #domain signal sequence #status predicted #label SIG\
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Eur. J. Immunol. (1992) 22:1477-1481
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CYtCkine: structural and functional conservation between
mouse and man.
                                                                    #product monocyte chemoattractant protein 1 #status
experimental #label MAT\
  cytokine; glycoprotein; inflammation; pyroglutamic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence extracted from NCBI backbone (NCBIN:106768,
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #sequence_revision 16-Aug-1996 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   translation not shown; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Danoff, T.M.; Lalley, P.A.; Chang, Y.S.; Heeger, P.S.
                                                                                                                                                                                                                                                  #length 99 #molecular-weight 11025 #checksum 7984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #formal_name Mus musculus #common_name house mouse
18-Jun-1993 #sequence revision 16-21104 #+2.4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                        Ouery Match 79.1%; Score 72; DB 2; Length 99; Best Local Similarity 58.3%; Pred. No. 4.53e-03; Matches 7; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #cross-references EMBL:U02298; NID:9460090; PID:9460091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ##cross-references EMBL:X70675; NID:9475205; PID:9475206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ##residues 1-18,'A',20-91 ##label SCH
##cross-references GB:S37648; NID:9250207; PID:9250208
##experimental_source macrophage cell line PU5-1.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-Jan-1999
I48875; A46539; I48654; I56970
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                                                                                                                                                                                                                                                                                                                                                                                  73 EICADPKOKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                            1 OVCADPSESWVQ 12
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This protein belongs to the beta-chemokine family which is one of the major HV-suppressive factors. It plays roles in autoimmune processes such as multiple sclerosis and rheumatoid arthritis and in tumor biology, and contribute to the trafficking and recuitment of the responsive cells.
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#authors van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van Damme, J.; Opdenaker, G.
#journal Biochem. Biophys. Res. Commun. (1997) 231:726-730
#title Human monocyte chemotactic protein-2: cDNA cloning and regulated expression of mRNA in mesenchymal cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #domain signal sequence #status predicted #label SIGN #product monocyte chemotactic protein-2 #status predicted #label MAT
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##cross-references GB:Y10802; NID:g1924937; PID:e294008; PID:g1924938
##experimental_source bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *superfamily macrophage inflammatory protein chemotaxis; cytokine; immediate-early protein; inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #domain signal sequence #status predicted #label SIGN #product monocyte chemoattractant cytokine RANTES #status predicted #label MAT #length 91 #molecular-weight 10071 #checksum 3010
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#formal_name Homo sapiens #common_name man
02-May-1997 #sequence_revision 18-Jul-1997 #text_change
17-Mar-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
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                                                                                                                                                                                                     ##NOTECUTE_TYPE MANAGE | ##Iabel NEI | ##Iabel NEI | 1-40, E', 42-91 #Iabel NEI | 1-40, E', 42-91 | 1-40, E'
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28.0%; Score 71; DB 2; Length 99;
Best Local Similarity 66.7%; Pred. No. 7.16e-03;
Matches 8; Conservative 2; Mismatches 2; Indels
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Pred. No. 7.16e-03;
1; Mismatches 3; Indels
                                                                                                                         translated from GB/EMBL/DDBJ
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the Scy superfamily. #cross-references MUID:92277990
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Best Local Similarity 66.7%;
Matches 8; Conservative
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Run on: Fri Feb 4 17:32:10 2000; MasPar time 3.66 Seconds 69.659 Million cell updates/sec

Tabular output not generated.

Title: >US-09-150-813-44
Description: (1-12) from US09150813.pep
Perfect Score: 91

Sequence: 1 QVCADPSESWVO 12 Scoring table: PAM 150 Searched: 170751 seqs, 21266608 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

1

a geneseq35
lipart1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part1 8:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part17 18:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 32:part32 33:part33 34:part44 35:part35 36:part36 37:part37 38:part38 39:part39

Statistics: Mean 18.046; Variance 69.849; scale 0.258

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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NO.	Score	Match	Match Length DB	DB	ED .	Description	Pred. No.
н	91	100.0	69	7	R38981	LD78 Glu56>Ser.	8.88e-02
7	91	100.0	74	7	R38925	ACT-2.	8.88e-02
٣	91	100.0	91	7	P91030	Human H400 polypeptid	8.88e-02
4	91	100.0	92	33	W82717	Human Act-2 protein.	8.88e-02
S	91	100.0	92	7	R36770	MIP-1beta.	8.88e-02
ø	91	100.0	92	4	R22712	Human MIP-1 alpha	8.88e-02
7	91	100.0	92	٦	R04220	Act-2 clone gene prod	8.88e-02
80	91	100.0	92	-	R04222	pAT744 gene product e	8.88e-02
σ	91	100.0	92	35.	W76225	Human chemokine MIP-1	8.88e-02
10	91	100.0	92	13	R70798	MIP-1-beta.	8.88e-02
11	91	100.0	92	~	R05900	Act-2 gene product.	8.88e-02
12	91	100.0	93	,	R05903	pAT 744 gene product.	8.88e-02
13	91	100.0	331	35	W76223	Human chemokine MIP-1	8.88e-02
14	86	94.5	99	7	R38948	N1-3 LD78.	2.65e-01
15	86	94.5	69	7	R39146	LD78 Arg17>Glu.	2.65e-01
16	86	94.5	69	7	R38938	LD78 Phe28>Glu.	2.65e-01

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ALIGNMENTS

Query Match 100.0%; Score 91; DB 7; Length 69; Best Local Similarity 100.0%; Pred. No. 8.88e-02; Matches 12; Conservative 0; Mismatches 0; Indels 0;

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Gaps

Db 48 qvcadpseswvq 59

1 QVCADPSESWVQ 12

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                                                                                                                                                                                                                                                                                                                                                                                                     providing better tissue penetration

providing better tissue penetration

bisclosure; Page 181-182; 294pp; English.

The secondary and territary structure of LD78 and MIP-lalpha have
been shown to be almost identical. Only a difference in the nature
of a side-chain or charge interaction in the vicinity of Trp57 is
cof a side-chain or charge interaction in the vicinity of Trp57 is
been shown to be almost identical. Dayl a difference in the nature
of a side-chain or charge interaction in the vicinity of Trp57 is
cobserved for the two proteins. Despite having a similar secondary
structure to LD78 and MIP-lalpha, near u.v. c.d. studies show ACT2
has a different tertiary conformation as highlighted by the shape
and intensity of the spectrum. This provides strong evidence that
LD78 and not ACT2 is the human homologue of MIP-lalpha.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
cutility as stem cells. The contextive agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
tunour therapy, psoriasis or other diseases involving hyper-
tunour therapy, analogues are Phel2-Gln, Ly344>Ser, Arg17>Gln (with
cln18>Glu) and, esp., Asp28>Analogues.

properties or the pref. LD78 analogues.
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Human H400 polypeptide.
H400 polypeptide; markers; activated T cells;
pcD(SR-alpha) H400; immunogenic; immune system; anitbody; human.
                                                                                                                                                                                                                                                                                                                                                                      Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                             SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
Synthetic (Homo sapiens).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 91; DB 7; Length 74; Pred. No. 8.88e-02; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                               Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-FEB-1989; 301341.
18-FEB-1988; US-157743.
(SCHE) Schering Biotech. Co.
Brown KD, Mosmann TR, Zurawski G, Zurawski SM;
                                                                                                                                                                                                                                                                      (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
JT 2
R38925 standard; Protein; 74 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 100.0%;
Local Similarity 100.0%;
                                                       23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                    23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
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                                                                                                                                                                                             08-JUL-1993.
23-DEC-1992; G02390.
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EP-329363-A.
23-AUG-1989.
                                                                                                                                                                                                                                                                                         Craig S, C
Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                        R38925;
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While you shall work the parachemokine, ZCHEMO-8 - used to develop products for treating e.g. ischaemia, reperfusion, wound healing, products for treating e.g. ischaemia, reperfusion, wound healing, by products for treating e.g. ischaemia, reperfusion, wound healing, by inflammantion, asthma or infections bisclosure; Page 93: 131pp; English.

CC This sequence represents a human beta chemokine, ZCHEMO-8 is isolated. CA letered levels of ZCHEMO-8 may be indicative of pathological conditions, including infections, cancer, myelopoletic disorders, autoimmune calls (and immunodefaliencies. The ZCHEMO-8 polypeptides can be used, c.g. to reduce the damage in ischaemic and reperfusion injuries, in a wound healing regime to stimulate an infiltration of immune cells (e.g. condocytes, neutrophils, T lymphocytes or basophils) to a wound site to facilitate healing. ZCHEMO may be used to mobilise progenitor cells from the marrow into the peripheral blood for transplants. ZCHEMO-8 polypeptides could be used to further define the role of chemokines in mediating suppression of HIV infection to AIDS. Use may be made of ZCHEMO-8 polypeptides during chemotherapy or radiation therapy, to protect harmatopoietic cells. ZCHEMO-8 antagonists may be made of ZCHEMO-8 certain macrophages, neutrophils, basophils, Blymphocytes and/or T cells can appetute effect in diseases where the inhibition of activation of certain macrophages, neutrophils, basophils, Blymphocytes and from using ZCHEMO-8 antagonists for chronic inflammatory celearosis, insulin dependent diabetes and systemic lupus erythematosus, rheumatoid arthritis, allergies, asthma or arteriosclerosis. Also benefit may be desired from using ZCHEMO-8 antagonists for chronic inflammatory and infective diseases. Antagonists may be used to dampen or inactivate confidence of the deciration or gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         autoimmune disorder; immunodeficiency; myelopoietic; wound healing; transplant, progenitor cell; HIV infection; AIDS; chemotherapy; realist macrophage activation inhibitor; B lymphocyte; chronic inflammatory disease; infective disease; diagnosis; detection; drug screening; gene therapy; Act-2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human Act-2 protein.
Chemokine; ZCHEMO-8; human; pathological condition; infection; cancer;
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                  ;
                used as markers specific for activated T cells, for monitoring the immune system.

Disclosure; fig 2; l6pp; English.

H400 polypeptide (see N90532). This protein is specifically produced by activated T cells, and is useful for detecting cells which produce H400 or mRNA transcripts of H400 for monitoring the immune system. Claims 1 and 2 give polypeptides corresp. to the featured peptides above.
                                                                                                                                                                                                                                                     Score 91; Pred. No. 8.88e-02; Viennatches 0; Indels
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Pred. No. 8.88e-02;
polypeptide H400 and encoding nucleic acid
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W82717 standard; Protein; 92 AA.
                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0%;
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Best Local Similarity 100.0%;
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-DEC-1998.
19-MAY-1998; U10329.
29-MAY-1997; US-047860.
                                                                                                                                                                                                                                                                                                                                           71 qvcadpseswvg 82
                                                                                                                                                                                                                                                                                                                                                                          1 QVCADPSESWVQ 12
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                                                                                                                                                                                                     91 AA;
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Example 3; Fig 1; 38pp; English.

This sequence was deduced from the nucleotide sequence 023729.

This sequence was produced by cloning into the expression vector pyMIP300. The human MIP-lalpha sequence was derived from the lambda gilo cDNA clone hMIP1-13, and the GAPDH promoter sequence, alpha factor transcription terminator derived from plasmid pGAII, cappa factor transcription terminator derived from plasmid pGAII, construction of which is described in patent application EP034-274. Recombinantly produced MIP proteins have diagnostic and therapeutic utility for detecting and treating infections, cancer, myelopoietic dysfunction and autoimmune diseases. Although not directly cytotoxic for WEHI tumor cells, MIP-I treated macrophages
                                                                                                                                                                                                                                                                                Suppression of megakaryocytopoiesis - by administration of megakaryocytopoiesis - by administration of macrophage inflammatory protein-1 or -2 Disclosure; Page 17: 26pp; English.

A claimed method for reducing the no. of circulating platelets in the bloodstream of a mammal comprises admin. of MIP-1 and/or MIP-2 or their analogues to induce such a reduction. The MIP-1, MIP-2 or analogue may be operatively linked to a carrier. The MIPs can be used to inhibit megakaryocytopoiesis to effect in vivo reduction of platelet nos. They can be used to treat disorders with excessively high platelet counts such as thrombocytosis, stroke, pulmonary emboli
                                                                                                                                  Macrophage inflammatory protein; megakaryocytopoiesis; MIP-1; MIP-2; thrombocythemia; reactive thrombocytosis; stroke; emboli; platelet; myeloproliferative disorder.
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0
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Macrophage inducible protein; cancer diagnosis; infection;
myelopoietic dysfunction; autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 91; DB 7; Length 92;
Pred. No. 8.88e-02;
0; Mismatches 0; Indels
                                                                             R36770 standard; protein; 92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rr 6
R22712 standard; Protein; 92 AA.
R22712;
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WPI; 92-132088/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                   27-MAY-1993.
13-NOV-1992; U09671.
15-NOV-1991; US-792988.
(UYPE-) UNIV PENNSYLVANIA.
                                                                                                        29-SEP-1993 (first entry)
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14-SEP-1990; US-582636.
72 gvcadpseswvg 83
                         1 OVCADPSESWVQ 12
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                                                                                                                                                                                                                                                                     WPI; 93-182239/22
                                                                                                                                                                           Homo sapiens.
W09309799-A.
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WO9205198-A.
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                                                                                                                        MIP-lbeta.
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                     tumour targets. MIP-1 treatment stimulated proliferation of mature tissue macrophages; this effect was synergistic with both CSF-1 and GM-CSF. Purified preparations of the recombinantly derived MIP-lalpha peptide alone induced TNF and IL-6 in macrophages, but MIP-labet adid not. As little as twofold excess MIP-lbeta blocked bioactivity defined for native MIP-1 and recombinant MIP-lalpha blocked bioactivity defined for native MIP-1 and recombinant MIP-lalpha errythropoietin of proliferation of less differentiated sequence 92 AR.
exhibited enhanced antibody-independent macrophage cytotoxicity for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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The lymphokine/cytokine-like proteins are associated with the inflammatory response and/or have mitogenic activities. Antigens raised to the proteins may be useful in detection and purification, especially in bloassays of various tumour cells or genetic defects in the inflammatory response.
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Periferal blood mononuclear cell; PBMC; lymphokine; cytokine; mitogen; ds.
                                                                                                                                                                                                                                                                                                       Score 91; DB 4; Length 92;
Pred. No. 8.88e-02;
0; Mismatches 0; Indels
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16-DEC-1988; US-312001.
(USSH) US Dept Health & Human.
Siebenlist U, Leonard WJ, Zipfel PJ, Irving SG, Kelly K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New lymphokine-cytokine genes - isolated using mRNA from activated human periferal blood mononuclear cells and T cells.
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16-DEC-1988; 312001.
16-DEC-1988; US-312001.
(USSH) US Dept Health & Human.
("SH) US Dept Health & Human.
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Pred. No. 8.88e-02;
0; Mismatches 0; Indels
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pAT744 gene product encoding activated T cell mkNAs.
Periferal blood mononuclear cell; PBMC; lymphokine;
cytokine; mitogen; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R04220 standard; protein; 92 AA.
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                       12; Conservative
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N-PSDB; Q03682.
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Sat Feb

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This sequence represents a human chemokine MIP-lbeta domain, derived from sequence represents a human chemokine MIP-lbeta domain, derived from HUMACT2A. This sequence is used in the production of a construct comprising an isolated polynucleotide encoding a chimeric polypeptide evaluation comprises at least I chemokine polypeptide evaluation that chimeric polypeptides will have longer and in the construction, the chimeric polypeptides will have longer and increased biological activity and can direct the chemokine to a particular site. The chimeric polypeptides can also be designed to inhibit or desensitise chemokine receptors. They can be used to affect the chemotactic recruitment of migratory calls, e.g. for stimulating or inhibiting angiogenesis, for regeneration of bone, cartilage, ligament or for treating or preventing inflammatory or autoimmune disorders. They can also be used as vaccine adjuvants or to enhance the activity of antigen cresenting calls and for treating or preventing HIV infection.

Neutralising antibodies binding to the chimeric polypeptide may also be useful as the chemokine domain of the chimeric polypeptide and also in the treatment of some forms of cancer where abnormal expression of contacts.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-DEC-1998 (first entry)

Human chemokine MIP-lbeta domain protein fragment.

Chemokine, MIP-lbeta chimeric; human; heterologous protein; inhibitor; receptor; chemotaxis; migratory cell; angiogenesis; bone; regeneration; cartilage; ligament; tendon; bone marrow; transplant; inflammation; autoimmune disorder; vaccine adjuvant; antigen presenting cell; cancer; HIV; human immunodeficiency virus; therapy; prevention.
isolated using mRNA from activated human periferal blood isolated using mRNA from activated human periferal blood mononuclear calls and T cells.

Disclosure; 184pp; English.

Disclosure; 184pp; English broteins are associated with the purphokine/cytokine-like proteins are associated with the inflammatory response and/or have mitogenic activities, Antigens raised to the proteins may be useful in detection and purification, especially in bioassays of various tumour cells or genetic defects in the inflammatory response.

The best copy of the sequence available is still unclear and some errors in the sequence may occur.
                                                                                                                                                                                                                                                                                                                                                           Gaps
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Pred. No. 8.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                           0; Indels
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Pred. No. 8.88e-02;
0; Mismatches 0; Indels
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W76225 standard; Protein; 92 AA.
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Best Local Similarity 100.0%;
Matches 12; Conservative
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Best Local Similarity 100.0%;
Matches 12; Conservative
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Herrmann SH, Swanberg SL;
WPI; 98-495387/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-FEB-1997; US-808720.
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27-FEB-1998; U04002.
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72 qvcadpseswvq 83

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                          Screening for cpds. with anti-heparanase activity - by detecting screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13: Page 47: 60pp; English.

Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced Sequence 92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probes raised to the gene product may be used in bioassay of the product, useful in detecting tumour cells, genetic defects in the inflammatory response, or in vivo, for the detection of immune system activation. The proteins may also be used to determine the presence of their receptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New lymphokine-cytokine-like genes - isolated by subtraction cloning and hybridisation using mRNA from activated peripheral blood T cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human lymphokine/cytokine-like protein; mitogenic; ds.
                                                                                                                                                  Macrophage inflammatory protein 1-beta; MIP-1-beta; heparanase; heparin; heparan sulfate; arthritis; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-507-1990.
16-DEC-1989; UO5603.
16-DEC-1988; US-285489.
(USDC ) US SEC OF COMMERCE.
SIEBENLIST U, ZIPFEL PE, KELLEY K, IRVING SG, NAPOLITANO M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 91; DB 13; Length 92;
Pred. No. 8.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 91; DB 1; Length 92; Pred. No. 8.88e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R05900 standard; protein; 92 AA.
                                                                            R70798 standard; Protein; 92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; 137pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                       Ledbetter SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-NOV-1990 (first entry)
                                                                                                                   29-AUG-1995 (first entry)
                                                                                                                                                                                                                                                  09-FEB-1995.
26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                               cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72 gvcadpseswvg 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 QVCADPSESWVQ 12
1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 90-224535/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Act-2 gene product.
                                                                                                                                                                                                                                                                                                                                                                      WPI; 95-082239/11.
                                                                                                                                                                                                                                                                                                                               (UPJO) UPJOHN CO.
Hoogwerf AJ, Ledb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                    WO9504158-A.
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                                                                                                                                         MIP-1-beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R05900;
                                                                                              R70798;
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R38948;
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Matches
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Human chemokine MIP-lbeta domain protein from clone MPB-X.

Human chemokine, MIP-lbeta; chimeric; human; heterologous protein; inhibitor; chemotaxis; migratory cell; angiogenesis; bone; regeneration; cartilage; ligament; tendon; bone marrow; transplant; inflammation; autoimmune disorder; vaccine adjuvant; antigen presenting cell; cancer; HIV; human immunodeficiency virus; therapy; prevention.
                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                   Disclosure: 137pp; English.

Probes raised to the gene product may be used in bloassay of the product, useful in detecting tumour cells, genetic defects in the inflammatory response, or in vivo, for the detection of immune system activation. The proteins may also be used to determine the presence of their receptors.

Sequence 93 AA:
                                                                                                                                                                                                                                     New lymphokine-cytokine-like genes - isolated by subtraction cloning and hybridisation using mRNA from activated peripheral blood T cells.
                                                                                                    par 744 gene product.
Act-2; human lymphokine/cytokine-like protein; mitogenic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New chimeric polypeptide(s) - comprise chemokine polypeptide covatently linked to heterologous polypeptide, used for, e.g. chemotactic recruitment of migracry cells claim 16c; Page 50-51; 69pp; English.
                                                                                                                                                                               (USDC ) US SEC OF COMMERCE.
SIEBENLIST U, ZIPFEL PE, KELLEY K, IRVING SG, NAPOLITANO M,
                                                                                                                                                                                                                                                                                                                                                          Score 91; DB 1; Length 93;
Pred. No. 8.88e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= MIP-1beta
/note= "Chemokine domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "signal peptide"
25..331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                        JF 13
W76223 standard; Protein; 331 AA.
                                                           r 12
R05903 standard; protein; 93 AA.
R05903;
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/label= signal
                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                          27-NOV-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GEMY ) GENETICS INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Herrmann SH, Swanberg SL; WPI; 98-495387/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-FEB-1998; U04002.
28-FEB-1997; US-808720.
                                                                                                                                                        15-DEC-1989; U05603.
16-DEC-1988; US-285489.
      72 gvcadpseswvg 83
                  1 QVCADPSESWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                    73 qvcadpseswvg 84
                                                                                                                                                                                                                                                                                                                                                                                                                        1 QVCADPSESWVQ 12
                                                                                                                                                                                                                 90-224535/29.
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                                                                                                                           Homo sapiens.
WO9007009-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9838212-A2
                                                                                                                                                28-JUN-1990
                                                                                                                                                                                                      LEONARD WJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W76223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein
                                                              RESULT
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This sequence represents a human chemokine MIP-lbeta domain, isolated from CDNA clone MPB-X. This sequence is used in the production of a construct comprising an isolated polynucleotide encoding a chimaric polypeptide which comprises at least 1 chemokine polypeptide covalently attached to at least 1 heterologous polypeptide. By including a attached to at least 1 heterologous polypeptide By including a have longer and increased biological activity and can direct the chawce longer and increased biological activity and can direct the chemotracial site. The chimaric polypeptides will casigned to inhibit or desensitise chemokine receptors. They can be used to affect the chemotractic recruitment of migratory cells, e.g. for affect the chemotractic recruiting transplanted bone marrow cartilage, ligament or tendon, for recenting transplanted bone marrow cartilage, ligament or tendon, for recruiting transplanted bone marrow calls to bone marrow, or for treating or preventing inflammatory or autoimmune disorders. They can also be used as vaccine adjuvants or to enhance the activity of antigen presenting cells and for treating or preventing HIV infection. Neutralising antibodies binding to the chimeric polypeptide and also in the treatment of some forms of the chameric polypeptide and also in the treatment of some forms of cancer where abnormal expression of the chemokine is involved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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Most pref. LD78 analogues are Phel25Gln, Lys44>Ser, Arg1>Glu (with analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, providing better tissue penetration.

Example 23; Page 58; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N1-3 LD78.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 91; DB 35; Length 331;
Pred. No. 8.88e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-1991; GB-027319.
14-0CT-1992; GB-021587.
[BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S. Czaplewski LG, Edwards RM, Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72 gvcadpseswvg 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 OVCADPSESWVO 12
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23-DEC-1992; G02390.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   331 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence
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Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, alpha - unable to form stable multimer higher than dodecamer, broviding better tissue penetration.

Example 124; Page 94; 294pp; English.

Example 124; Page 94; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyperpoliterative stem cells.

C Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln18>Gln1
                                                                                                                                                                                                                                       LD78 Arg175clu.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
Homo sapiens.
W09313206-A.
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Pred. No. 2.65e-01;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W0931527

) 08-UUL-1993.

F 23-DEC-1991; GB-027319.

PR 14-CCT-1992; GB-021587.

PA (BRBI.) BRITISH BIO-TECHNOLOGY LTD.

Traiq S, Czaplewski LG, Edwards RM, Gilbert RJ;
.T 15
R39146 standard; Protein; 69 AA.
R39146;
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Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                             23-NOV-1993 (first entry)
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Search completed: Fri Feb 4 17:32:29 2000 Job time: 19 secs.

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Gaps .:

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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:39:31 2000; MasPar time 2.52 Seconds 134.543 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-65 (1-12) from US09150813.pep 96 Title: Description: Perfect Score:

1 EICADPKEKWVQ 12 Sequence:

77977 seqs, 28268293 residues Searched:

PAM 150 Gap 15

Scoring table:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

Mean 25.586; Variance 32.187; scale 0.795 swiss-prot37 1:swissprot Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Pred. No.	5.73e-10	3.40e-09	6.13e-09	1.98e-08	3.55e-08	3.55e-08	3.55e-08	6.34e-08	6.34e-08	1.13e-07	1.13e-07	1.13e-07	1.13e-07	2.01e-07	2.01e-07	3.56e-07	6.31e-07	6.31e-07	6.31e-07	6.31e-07	1.11e-06	1.96e-06	
Description	MONOCYTE CHEMOTACTIC P	CHEMOTACTIC	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	EOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	EOTAXIN PRECURSOR (EOS	MONOCYTE CHEMOTACTIC P	
QI	MCP4_HUMAN	MCP1_CANFA	MCP1_PIG	MCP2_BOVIN	EOTA_MOUSE	EOTA_RAT	MCP5_MOUSE	EOTA_HUMAN	MCPA_BOVIN	IL8_CANFA	IL8_SHEEP	IL8_PIG	MCP1_RABIT	MI1A_RAT	MCP3_HUMAN	MCP2_HUMAN	MCP2_PIG	IL8_RABIT	IL8_BOVIN	MCP1_CAVPO	EOTA_CAVPO	MCPB_BOVIN	
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Query	100.0	96.9	95.8	93.8	92.7	92.7	92.7	91.7	91.7	9.06	90.6	90.6	90.6	9.68	9.68	88.5	87.5	87.5	87.5	87.5	86.5	85.4	
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3D-STRUCTURE MODELLING
    EXOGENOUS PATHOGENS.

1. MASS SPECTROMETRY: MW-9314; MW_ERR=30; METHOD=MALDI; RANGE=21-98.

1. MASS SPECTROMETRY: MW-9314; MW_ERR=30; METHOD=MALDI; RANGE=22-98.

1. MASS SPECTROMETRY: MW-8760; MW_ERR=30; METHOD=MALDI; RANGE=24-98.

1. INDUCTION: BY INTERLEBYIN-1 AND TNF-ALPHA.

1. INDUCTION: BY INTERLEBYIN-1 AND TNF-ALPHA.

1. INSUCRION: BY INTERLEBYIN-1 AND TNF-ALPHA.

1. TISSUE SPECIFICITY: WIDELY EXPRESSED: POUND IN SMALL INTESTINE, THYMUS, COLON, LUNG, TRACHEA, STOWACH AND LYMPH NODE. LOW LEVELS CONTINED THY SPECIFICITY: WIDELY SMOOTH MUSCLE CELLS.

1. THIS PROTEIN CAN BIND HEPARIN.

2. ITHIS PROTEIN CAN BIND HEPARIN.

3. FURNOR AGONT SOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND TWO MINOR ISOFORMS (LA)MCP-4 AND TWO MINOR ISOFORM MCP-4.

3. INTERLEBYING STOTEIN CAN BIND LESS ACTIVE THAN MCP-4.

3. INTERLEBYING STOTEIN CAN BIND LESS ACTIVE THAN MCP-4.

3. INTERLEBYING STOTEIN THAN MCP-4.

3. INTERLEBYING STOTEIN THAN MCP-4.
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                                                              POWER C.A., MEYER A., RISON S.C.G., GUVE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTYES, LYMPHOCYTES,
BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONLLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCIEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-1990 (REL. 13, CREATED)
01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 3, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECIDENCE (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HCl1) (SMALL INDUCIBLE CYTOKINE
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           SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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Pred. No. 5.73e-10;
0; Mismatches 0;
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DF52F6EC CRC32;
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BY SIMILARITY
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MIM; 601391; ...
PROSITE; PSO00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; 1D0L.
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Best Local Similarity 100.0%;
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DANTE M., GIBSON A.;
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                                                        TISSUE=LUNG;
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P13500;
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DISULFID
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"Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
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"Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form."

BIOCHEM. BIOPHYS. RES. COMMUN. 167:904-909(1990).
                                                                                                                                                                                                    FURUTANI Y., NOMORA H., NOTAKE M., OYAMADA Y., FUKUI T., YAMADA M., LARSEN C.G., OPPENHEIM J.J., MATSUSHIMA K.; "Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF)."; BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989).
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ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA S., GRIFFIN P.R., SHABANOWITZ J., HUNT D.F., APPELLA E.;
"Complete amino acid sequence of a human monocyte chemoattractant, i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "The expression of monocyte chemotactic protein (MCP-1) in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.; "Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family."; INT. IMMUNOL. 1:388-399(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDILLE; 9000466.

SHYY Y.J., 912 10.8., KOLATTUKUDY P.E.;
"Structure of human monocyte chemotactic protein gene and its
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LI Y.S., SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F., KOLATTUKUDY P.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YOSHIMURA I., YUHKI N., MOORE S.K., APPELLA E., LERMAN M.I.,
LEONARD E.J.;
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YOSHIMURA T., LEONARD E.J.;
"Human monocyte Demoattractant protein-1 (MCP-1).";
ADY. EXP. MED. BIOL. 305:47-56(1991).
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MOL. CELL. BIOCHEM. 126:61-68(1993).
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                                                                                                                                   SEQUENCE FROM N.A.
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MEDLINE; 89184525.
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FEBS LETT. 395.277-282(1996).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR BOSINOPHILS. AGGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORTASIS, RHEUMATOID
ARTHRITIS OR ATHENOSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT
OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBUNIT: MONOMER OR HOMODIMER: IN EQUILIBRIUM.

PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY.

IT FROM AN ACTIVATOR OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 94253189.

ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
Ztructure/Activity analysis of human monocyte chemoattractant
"Structure/Activity analysis. of human monocyte chemoattractant
protein-1 (MCP-1) by mutagenesis. Identification of a mutated protein
that inhibits MCP-1-mediated monocyte chemotaxis.";
J. BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.; "Deletion of the NH2-terminal residue converts monocyte chemotactic protein 1 from an activator of basophil mediator release to an ensinophil chemoattractant.";
                                                                                                                                                                                                                                                                                                     MEDLINE; 97143315.
LUBKOWSKI J., BUJACZ G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.;
The structure of WCP-1 in two crystal forms provides a rare example
of variable quaternary interactions.";
NAT. STRUCT. BIOL. 4:64-69(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 96234959.
HANDEL T.M., DOMAILLE P.J.;
"Heteronuclear (1H, 13C, 15N) NMR assignments and solution structure of the monocyte chemoattractant protein-1 (MCP-1) dimer.";
                                GRONENBORN A.M., CLORE G.M.; "Modeling the three-dimensional structure of the monocyte chemo-attractant and activating protein MCAF/MCP-1 on the basis of the PROTEIN structure of interleukin-8."; PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.; "Structural characterization of a monomeric chemokine: monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EFFECT OF DELETION OF N-TERMINAL RESIDUES.
                                                                                                                                                                                                                                                                 K-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eosinophil chemoattractant.";
J. EXP. MED. 183:681-685(1996).
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MEDLINE; 97053697
MEDLINE; 91312872
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRUCTURE BY NMR
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X14768;
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EMBL;
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KUMBER A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A., LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J., ROSSEN R.D., SMITH C.M., ENTMAN M.L.; "Induction of monocyte chemoattractant protein-1 in the small veins of the ischemic and reperitused canine myocardium."; cIRCULATION 95:693-700(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERPUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERPUSED MYOCARDIUM.

SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MISSING: 90% REDUCTION IN ACTIVITY.
MISSING: 83% REDUCTION IN ACTIVITY.
D->A: 90% REDUCTION IN ACTIVITY.
N->A: 50% REDUCTION IN ACTIVITY.
R->F: 95% REDUCTION IN ACTIVITY.
S->Q: 40% REDUCTION IN ACTIVITY.
Y->D: LOSS OF ACTIVITY.
R->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
7.5558695 CRC32;
                                                                                                                                                                                                                                                                                                                                                                             SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                  MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOSS OF ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 93; DB 1; L. Pred. No. 3.40e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101 AA.
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PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
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TISSUE-JUGULAR VEIN ENDOTHELIAL;
MEDLINE; 97176620.
                          JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11025 MW;
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                                             S69738; G545465; -. S71513; G240868; -. A17786; G641145; -.
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CANIS FAMILIARIS (DOG)
                                                                                                                                                                      1DOK; 12-MAR-97.
1DOL; 12-MAR-97.
1DOM; 14-OCT-96.
1DON; 14-OCT-96.
                                                                                                                                                                                                                                                                                                                                                     PFAM; PF00048; 118; 1. CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84
                                                                                                                       A35474; A35474.
S03339; S03339.
                                                                                                                                                                                                                                                                              1MCA; 15-OCT-94.
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les 11; Consei
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-!- INDUCTION: BY TNF-ALPHA.
-!- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR VEINS, AND INFILTRATING LEUKOCYTES.
-!- SIMILARITY: BELOKOGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE: 94183284.
HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;
"Porcine luteal cells express monocyte chemoattractant protein-1
(MCP-1): analysis by polymerase chain reaction and cDNA cloning.";
BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                             CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 93; DB 1; Le
Pred. No. 3.40e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Y SIMILARITY.
A7075B14 CRC32;
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LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99 AA.
                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY).
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS
                                                                                                                                                                                                                                                                      PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; i18; 1. HSSP; P13500; 1DON.
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P42831:
P42831:
NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQU
15-JUL-1998 (REL. 36, LAST SEQU
                                                                                                                                                                                                                                                                                                                                                                                                                                                       101 AA; 11121 MW;
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ilarity 91.7%;
Conservative
                                                                                                                                                                                                                                                     EMBL; U29653; G1144186; -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EICADPKEKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 EICADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCROFA (PIG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZACH O.R.F.
                                                                                                                                                                                                                                                                                                                           CYTOKINE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
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                                                                                                                                                                                                                                                                                                                                                               CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WEMPE F., HANES J., SCHEIT K.H.; "Cloning of the gene for bovine monocyte chemoattractant protein-2."; DNA CELL BIOL. 13:1-8(1994).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SUBUNIT: MONOWER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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EUKARYOTA; METAZOA; CHORDAȚA; VERTEBRAȚA; MAMMALIA; EUTHERIA;
                                                                                                             CTTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
SIGNAL
1 23 BY SIMILARITY.
CHAIN 24 99 MONOCYTE CHEMOTACTIC PROTEIN 1.
MOD_RES 24 24 PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MONOCYTE CHEMOTACTIC PROTEIN 2. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                         Score 92; DB 1; Length 99; Pred. No. 6.13e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
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Pred. No. 1.98e-08;
                                                                                                                                                                                                                                        BY SIMILARITY.
BY SIMILARITY.
ECC3AFB4 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                         2; Mismatches
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BY SIMILARITY.
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                                           PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. 
PFAM; PF00048; i18; 1. 
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; i18; 1. HSSP; P80098; 1NcV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY)
                                                                                                                                                                                                                                                                                           99 AA; 10976 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99 AA; 10900 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                           95.88;
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Best Local Similarity 75.0%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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EMBL; Z48479; G683717; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                         EMBL; X79416; G872313;
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24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||:||:|||
| EICADPKEKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                       73 EICAEPKOKWVO 84
                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 94114084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP2_BOVIN
                                                                                                                                                                                                                                          DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=LUNG;
MEDLINE; 96186746.
GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J.,
JERNINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., KOPF M.,
GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           response.";
IMMUNITY 4:1-14(1996).
IMMUNITY 4:1-14(1996).
IMMUNITY 4:1-14(1996).
INMUNITY 5:1-14(1996).
INTESTION: EXTRACELLULAR
INTESTION: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
INTESTION: HEART, SPLEEN, KIDNEY.
INTESTION: BY INTERFENON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
INTESTION: O-GLYCOSYLATER (PROBABLE).
INTIMARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROTHENBERG M.E., LUSTER A.D., LEDER P.; "Murine eotaxin: an eosinophil chemoattractant inducible in endothelial cells and in interleukin 4-induced tumor suppression."; PROC. NATL. ACAD. SCI. U.S.A. 92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *Mouse eotaxin expression parallels eosinophil accumulation during lung allergic inflammation but it is not restricted to a Th2-type
                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                           01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EQTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     F85A96BC CRC32;
                                                                                                                                           97 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL: U26426, G995911; -.
EMBL: U40672; G1113937; -.
MGD; MGI:103576; SCYAL1.
PROSITE: PS00472; SMALL_CYTO
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-C) (CHEMOKINE CC).
                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                  MUS MUSCULUS (MOUSE).
  84
                           ::|||||:|||||
1 EICADPKEKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
73 DVCADPRQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 96004658.
                                                                                                                    LT 6
EOTA_MOUSE
P48298;
                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
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                                                                                                                    RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP-5) (MCP-1 RELATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                       RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                      WILLIAMS C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C., FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (DEC-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                 P97545; 008780;
15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                               RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 89; DB 1; L
Pred. No. 3.55e-08;
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L -> S (IN REF. :
05B4ED45 CRC32;
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01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
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BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                97 AA
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EMBL; U96637; G2098785; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
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                                                                                                                PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C-C) (CHEMOKINE CC).
                                                                                                                  STANDARD;
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71 EICADPKKKWVQ 82
                                     1 EICADPKEKWVQ 12
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97 AA;
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MCP5_MOUSE
Q62401;
                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-LUNG;
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                                                                                                                EOTA_RAT
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Matches
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Gaps

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1; Indels

Score 89; DB 1; Length 97; Pred. No. 3.55e-08; 0; Mismatches 1; Indels

Similarity 91.7%; 11; Conservative

Query Match Best Local Similarity Matches 11; Conserv

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SEQUENCE FROM N.A.
MEDLINE; 96189937.
PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., KASSAM N.,
SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.C.,
MACKAY C.R.,
                                                                                                      "Human cotaxin is a specific chemoattractant for eosinophil cells and provides a new mechanism to explain tissue eosinophilia.";
                                                                                                                                                                                                                       "Cloning of the human eosinophil chemoattractant, eotaxin.
Spression, receptor binding, and functional properties suggest a
mechanism for the selective recruitment of eosinophils.";
J. CLIN. INVEST. 97:604-612(1996).
                                                                                                                                                                                                                                                                                                                      KITAGRA M., NAKAJIMA T., IMAI T., HARADA S., COMBADIERE C., TIFFANY H.L., MURPHY P.M., YOSHIE O.; "Molecular cloning of human eotaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil eotaxin receptor, CC chemokine receptor 3.";
   HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                  GARCIA-ZEPEDA E.A., ROTHENBERG M.E., OWNBEY T.R., LEDER P.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                        BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                  NAT. MED. 2:449-456(1996).
                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
TISSUE=SMALL INTESTINE;
MEDLINE; 96205964.
                                                       SEQUENCE FROM N.A. MEDLINE; 96181758.
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                                                                                                                                                                                                                                                                           JIA G. Q., GONZALO J.A., LLOYD C., KREMER L., LU L., MARTINEZ A.C., WERSHIL B.K., GUTERREZ-RAMOS J.C.;
"Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation.";
J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                            "Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human
                      MUS MUSCULUS (MOUSE).
EURARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                     SARAFI M.N., GARCIA-ZEPEDA E.A., MACLEAN J.A., CHARO I.F.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 89; DB 1; Length 104;
Pred. No. 3.55e-08;
0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08FA6C35 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                 J. EXP. MED. 185:99-109(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 AA; 11659 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 92.7%;
Best Local Similarity 100.0%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U50712; G1477582; -. EMBL; U66670; G1881583; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGI:108224; SCYA12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00472; SMALI
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DOL.
                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 97149438.
                                                                          SEQUENCE FROM N.A.
             SCYA12 OR MCP5.
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SEQUENCE
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"Genomic organization, complete sequence, and chromosomal location of the gene for human eotaxin (SCYAll), an eosinophil-specific {\tt CC}
                                                              BARTELS J., SCHLUETER C., RICHTER E., NOSO N., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.;
"Human dermal fibroblasts express ectaxin: molecular cloning, mRNA expression, and identification of ectaxin sequence variants.";
BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genomic organization, sequence, and transcriptional regulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9/443ULI.
SCHLUETER C., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRUMP M.P., RAJARATHNAM K., KIM K.S., CLARK-LEWIS I., SYKES B.D.;
                                                                                                                                                                                                                                                                                 GARCIA-ZEPEDA E.A., ROTHENBERG M.E., WEREMOWICZ S., SARAFI M.N., MORTON C.C., LUSTER A.D.;
SEQUENCE FROM N.A., SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the human ectaxin gene.";
BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).
                                                                                                                                                                                                                                                                                                                                                                                                   GENOMICS 41:471-476(1997).
                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                    TISSUE=PLACENTA;
MEDLINE; 97312708.
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                               96374440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 98380469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 97445071
                           IISSUE-FORESKIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRUCTURE BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BARTELS J.;
                                                                                                                                                                                                                                                                                                                                                                               chemokine.
                                               MEDLINE;
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ECTA_HUMAN STANDARD; PRT; 97 AA. P51671; P50877; 092490; 092491; 01-0cr1-1996 (REL. 34, CREATED) O1-0cr1-1996 (REL. 34, LAST SEQUENCE UPDATE) 15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE) ECTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).

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                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"Characterization by cDNA cloning of the mRNA of a new growth factor from bovine seminal plasma: acidic seminal fluid protein.";
BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN IA PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE; POLYMORPHISM; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L -> P (IN CLONE 34).
A -> T (IN CLONE 53).
R -> S (IN CLONE 34).
K -> R (IN CLONE 53).
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No. 6.34e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EOTAXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WEMPE F., HENSCHEN A., SCHEIT K.H.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10732 MW;
                                                                                                                                                                                      EMBL: U46573; G1280141; -...
EMBL: U34780; G1185440; -...
EMBL: D49372; G155241; -...
EMBL: Z7568; E251275; -...
EMBL: Z75669; E251275; -...
EMBL: Z75669; E251275; -...
EMBL: Z75669; E251289; -...
EMBL: Z92709; B329504; -...
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83.38;
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(CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                         PFAM; PF00048; i18; 1.
PDB; 2EOT; 11-NOV-98.
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TISSUE-SEMINAL PLASMA;
MEDLINE; 92096117.
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MEDLINE; 92181448.
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97
57
73
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Best Local Similarity F
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P28291;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                :- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T.,
GOTISUKA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA K.,
ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.;
"MOLECULAR Cloning and expression of canine interleukin 8 cDNA.";
CYTOKINE 6:455-461(1994).
WEMPE F., KUHLMANN J.K., SCHEIT K.H.; "Characterization of the bovine monocyte chemoattractant protein-1
                                                                                                       -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MONOCYTE CHEMOTACTIC PROTEIN 1A. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
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                                                                            BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994)
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Pred. No. 6.34e-08;
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BY SIMILARITY.
BY SIMILARITY.
C8F5821D CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; 1DON.
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STRAIN-MONGREL; TISSUE-JUGULAR VEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11114 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE; CHEMOTAXIS; SIGNAL
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Best Local Similarity 83.55,
10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91.7%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; L32659; G624394; -. EMBL; M84602; G163395; -.
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PIR; JC2336; JC2336.
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                                                                                                                             NEUTROPHILS.
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DISULFID
SEQUENCE
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GENE 150:367-369(1994).
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                                                                                            -!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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MEDLINE; 95114148.

KUKIELKA G.L., SMITH W.C., LAROSA G.J., MANNING A.M.,

KUKIELKA G.L., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,

MICHAEL L.H., ROT A., ENTMAN M.L.;

"Interleukin-8 gene induction in the myocardium after ischemia and reperfusion in vivo.";

J. CLIN. INVEST. 95:89-103(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIANE, 95121931.
LEGASTELOIS I., GREENLAND T., ARNAUD P., MORNEX J.F., CORDIER G.; "Sequencing of the ovine interleukin-8-encoding cDNA using the polymerase chain reaction.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 87; DB 1; Length 101;
Pred. No. 1.13e-07;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                          INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                    C-X-C) (CHEMOKINE CXC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ILB_SHEEP STANDARL,
1L8_SHEEP STANDARL,
101-JUN-1994 (REL. 29, CREATED)
01-JUN-1994 (REL. 29, LAST SEQUENCE UPDATE)
01-JUN-1995 (REL. 32, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
INTERLEUKIN-8.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY
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EMBL; D14285; G475152; -.
EMBL; G10308; G607814; -.
EMBL; AF044917; G2933472; -.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                         101 AA; 11280 MW;
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ilarity 83.3%;
Conservative
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HSSP; P10145; 11KL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EICADPKEKWVQ 12
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OVIS ARIES (SHEEP).
                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 95121931.
                                                                                       STRAIN-BEAGLE;
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                                                         SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;
SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;
"Cloning, sequencing, expression and inflammatory activity in skin of ovine interleukin.8"."
"LIMMUND. CELL BIOL. 72:398-405(1994).
-! FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS, BASOPHILS, AND T-CELLS, BUT NOT MONCOYTES. IT IS ALSO INVOLVED IN NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN RESPONSE TO AN INFLAMMATORY STIMULUS.
-! SOBUNIT: HOMODIMER.
-! SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SWALL CYTOKINE CXC). (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IL8_PIG STANDARD; PRT; 103 AA.
P26894; P22951;
01-AUG-1992 (REL. 19, CREATED)
01-AUG-1995 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
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ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE, 94103307.
LIN G., PEARSON A.E., SCAMURRA R.W., ZHOU Y., BAARSCH M.J.,
WEISS D.J., MURTAUGH M.P.;
"Regulation of interleukin-8 expression in porcine alveolar
macrophages by bacterial lipopolysac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 90.6%; Score 87; DB 1; Length 101; Best Local Similarity 83.3%; Pred. No. 1.13e-07; Matches 10; Conservative 1; Mismatches 1; Indels
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BY SIMILARITY.
5A574527 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; S74436; G786591; -.
PIR; S42496; S42496.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; il8; 1.
HSSP; P10145; IIKL.
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| EICADPKEKWVQ 12
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SEQUENCE FROM N.A. MEDLINE; 95137691.
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LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS
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                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation. The European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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0
                                                                                                                                                                                                                                                                                                                -:- TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES.
-:- INDUCTION: BY LIPOPOLYSACCHARIDE.
-:- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                          porcine alveolar macrophages.";
J. BIOL. CHEM. 2661845-8463(1991).
-1- FUNCTION: IL-8 ISA CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
        GOODMAN R.B., FOSTER D.C., MATHEWES S.L., OSBORN S.G., KUIJPER J.L., FORSTROM J.W., MARTIN T.R.; "Molecular cloning of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porcine IL-8 and another intercrine-alpha protein."; BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                               MEDILNE; 91217086.
GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.;
"Identification of two neutrophil chemotactic peptides produced by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 87; DB 1; Length 103; Pred. No. 1.13e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                 SUBMITTED (MAR-1996) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
W; A012D59D CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN I PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL, M86923; G164521; -.
EMBL, X61151; G516197; -.
EMBL, M99367; G1235612; -.
PIR, A44253; A44253
PIR, A39819; A39819.
PROSTEF, PS00471; SMALL_CYTOKINES_CXC; 1.
PSRM; PF00048; i18; 1.
HSSP, P10145; IRKL.
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Conservative
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                                                                                                                                                         SEQUENCE OF 26-45.
93041741
                                                                                                                                                                       STRAIN-YORKSHIRE
                                                                                                     REVISION TO 23.
                                                                                                                    GOODMAN R.B.
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MCP1_RABIT
P28292;
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                                                                                                                                                                                                       -1- SUBGNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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STHI M.M., GODLESKI J.J., PAULAUSKIS J.D.;

Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar macrophages.";

BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                      YOSHIMURA T., YOHKI N.;
"Neutrophil attractant/activation protein-1 and monocyte
chemoattractant protein-1 in rabbit. CDNA cloning and their
expression in spleen cells.",
J. IMMUNOL. 146:3483-3488(1991).
-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN=LONG EVANS; TISSUE=LUNG;
MEDLINE; 95238980
SHANLEY T.P., SCHMAL H., FRIEDL H.P., JONES M.L., WARD P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 87; DB 1; Length 125; Pred. No. 1.13e-07; 1; Mismatches 0; Indels
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FBAC9D27 CRC32;
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BY SIMILARITY.
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PFAM; PF00048; i18; 1. 
HSSP; P13500; 1DON.
SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
MEDLINE; 91225489.
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Matches 10; Conservative
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STRAIN-CD-1; TISSUE-LUNG;
MEDLINE; 95298037.
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75
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112
125 AA;
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MI1A_RAT
P50229;
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                                                                                           STRAIN-WISTAR;

X MEDLINE; 96183056.

T "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
T "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
T "Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
T "Ipopolysaccharide-stimulated rat macrophages in culture.";
I IDOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

- !- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMORINETIC PROPERTIES.
C HAGOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, ESGINOPHILS, BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
PRODUCTION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                  BINDS HEPARIN.
--- INDOCTION: BY LIPOPOLYSACCHARIDE (LPS).
--- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA.
"Role of macrophage inflammatory protein-1 alpha (MIP-1 alpha) in acute lung injury in rats.";
J. IMMUNOL. 154:4793-4802(1995).
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Pred. No. 2.01e-07;
1; Mismatches 1; Indels
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BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
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PFAM; PF00048; i18; 1.
HSSP; P13236; 1HUN.
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92
57
73
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10335 MW;
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Best Local Similarity 83.3%;
Matches 10; Conservative
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34
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92 AA;
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CONFLICT
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Search completed: Fri Feb 4 17:39:37 2000 Job time : 6 secs

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Gaps

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm
Run on: Fri Feb 4 17:38:11 2000; MasPar time 3.54 Seconds 72.063 Million cell updates/sec
Tabular output not generated.

170751 seqs, 21266608 residues PAM 150 Gap 15 Scoring table:

>US-09-150-813-65 (1-12) from US09150813.pep 96 1 EICADPKEKWVQ 12

Title: Description: Perfect Score: Sequence:

Post-processing:

Searched:

Minimum Match 0% Listing first 45 summaries

Database:

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1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part17 18:part18 19:part14 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 32:part32 33:part33 33:part39 33:part39

Mean 18.485; Variance 66.275; scale 0.279 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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9	1 26 W22675	00CM TS C/	75 26
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96.9 76 5 R28660 MCF. Macrophage chemoattra 2.71e-02 96.9 76 30 W40075 Macrophage chemoattra 2.71e-02 96.9 76 14 R87677 (3-Ala) MCP-1. 2.71e-02 96.9 76 14 R87676 (24-Arg) MCP-1. 2.71e-02 96.9 76 14 R87676 (24-Arg) MCP-1. 2.71e-02 96.9 76 14 R87680 Motocyte chemotactic 2.71e-02 96.9 76 10 W1131 Mature human monocyte 2.71e-02 96.9 76 10 W1131 Sense MCP-1. 2.71e-02 96.9 76 10 W09374 Monocyte chemotactic 2.71e-02 96.9 77 15 R86659 Mature MCP-1. 2.71e-02 96.9 99 30 W40174 Monocyte chemotactic 2.71e-02 96.9 99 13 R70800 Chemoattractant prote 2.71e-02 96.9 99 13 R70800 Chemoattractant prote 2.71e-02 96.9 99 13 R70800 MCF. MCF. 2.71e-02 97 15 R86659 Mature MCP-1. 2.71e-02 96.9 99 13 R70800 Chemoattractant prote 2.71e-02 96.9 99 14 R73914 Human monocyte chemo 2.71e-02 97 10 W30608 Mutine monocyte chemo 6.93e-02 97 R5680 Sequence of bovine 6.93e-02 97 M4721 Muton acid sequence of 8.76e-02 91.7 97 21 W00667 Human eosinocyte chemo 1.76e-02 91.7 97 21 W10099 Human eosinocyte chemo 1.76e-02 91.7 97 24 W14990 Human eosinocyte chemo 1.76e-02 91.7 97 24 W14990 Human eosinocyte chemo 1.76e-02 91.7 97 24 W14990 Human eosinocyte chemo 1.76e-01 89.6 69 91 R70811 Chemoattractant prote 1.40e-01 89.6 69 91 R70811 Chemoattractant prote 1.76e-01 89.6 69 91 R70815 Chemoattractant prote 1.76e-01 89.6 69 91 R70815 Chemoattractant prote 1.76e-01 89.6 60 91 R70815 Chemoattractant prote 1.76e-01 R0091 Human beta-chemoxine 1.76e-01 R0091 Human P0000 Human P00000 Human P00000 Human P00000 Human P00000 Human P	SULT 1 WINDERS Standard; Protein; 71 AA. WINDERS STANDARS STANDARS STANDARS STANDARS ASTANDARS ASTANDARD AS AND INFECTIONS ASTANDARD AS ASTANDARS AS ASTANDARD AS AND ASSANDARS ASTANDARS AS ASTANDARD AS AND ASSANDARS AND ASSANDARS AS ASTANDARD AS AND ASSANDARS AS ASTANDARD AS AND ASSANDARS AS ASSANDARS AND ASSANDARS AS ASSANDARD AS A SANDARD AS AND ASSANDARS AS A SANDARD AS A SANDARD AS AND ASSANDARS AND ASSANDARS AS A SANDARD AS A SANDARD AS A SANDARD AS AND ASSANDARS AND ASSANDARS AND ASSANDARS AS A SANDARD AS AND AS A SANDARD AS A SANDARD AS AND ASSANDARS AS A SANDARD AS A SAND
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RESULT
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    Well Wall Just 19984/10.

Why wall your search of the chemokine MCP-4 receptor - for identifying agonists or antagonists which can be used for treating e.g. infections, allergic and asthmatic reactions, atherosclerosis and arthritis

Disclosure; Fig 2; 25pp; English.

CC This is the chemokine MCP-4 sequence that can be used in screening compends for identifying MCP-4 receptor antagonists and agonists. MCP-4 receptor and agonists. MCP-4 receptor and agonists can be identified by contacting a compound with MCP-4 receptor and agonists can be identified with the receptor. MCP-4 receptor in compination and is used in the form of the isolated protein. It is receptor is expressed on the surface of a host cell or in a membrane comprising a nucleic acid sequence encoding the MCP-4 receptor, and colluring the cell line in a culture medium. Susceptibility to disease states associated with abnormal expression of the MCP-4 receptor can be identified using MCP-4, MCP-4 and/Or MCP-3 in a sample taken culturing the level of MCP-4 and/Or MCP-3 in a sample taken from a patient. Neutralising antibodies to the MCP-4 receptor can be identified using MCP-4, MCP-3, RANTES, MCP-1 or ectaxin. The contaction and antagonists identified can be used for treating disease contacts associated with the MCP-4 and/Or MCP-3 in a sample taken contaction and artigonists identified can be used for treating disease contactions, and advanced in the MCP-4 receptor, e.g. inflammatory states associated with the MCP-4 receptor, e.g. inflammatory states associated with the MCP-6 receptor, e.g. inflammatory states associated with the MCP-
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                                        Score 96; DB 26; Length /1, Pred. No. 1.33e-02;
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and for chromosome identification.
                                                                                                                                                                                                                                                                                                                               Chemokine MCP-4 protein sequence.
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Best Local Similarity 100.0%;
                                                             Query Match
Best Local Similarity 100.0%;
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                                                                                                      12; Conservative
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                                                                                                                                              45 eicadpkekwvg 56
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27-AUG-1997; G02313.
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WO9809171-A1.
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Example 11; Fig 5; 83pp; English.

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotactic protein 4 (MoP-4) Bac 3 variant, which can be used to treat betal0 as a variant, which can be tagonist can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, requilates haematopoiesis and generates antibodies. Labelled Ck betal0 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allerdies, prostaglandin dependent fever and infectious diseases, allerdies, prostaglandin dependent fever and be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
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                                                                                                                                                                                                                                                                                                                                                       Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH, Parmelee D, White J; WPI; 97-435153/40.
Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis
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The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotextic protein 4 (MCP-4) Bac 2 variant, which can be used to treat patients deficient in Ck betal0, while a Ck betal0 antagonist can be used to reduce excessive levels of Ck betal0. Ck
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Bac 2 chemokine betal0 or monocyte chemotactic protein 4 variant.
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chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4; Bac 2 variant.
fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
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(HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,
Parmelee D, White J;
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W22672 standard; Protein; 77 AA.
                                                                                                             .eukaemia; MCP-4; Bac 3 variant.
                                                                                                                                                                                                                                                 23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
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Best Local Similarity 100.0%;
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23-FEB-1996; U02598.
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WO9731098-A1.
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WO9731098-A1.
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19-MAR-1998
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The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotactic protein 4 (MCP-4) Droil/2 variant, which can be used to treat patients deficient in Ck betal0, while a ck betal0 antagonist can be used to reduce excessive levels of Ck betal0. Ck betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases. It also promotes wound healing, regulates haematopoiesis and generates c antibodies. Labelled Ck betal0 can be used to creat leukaemia, solid tumours, chronic or diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates c antibodies. Labelled Ck betal0 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to creen creat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic compounds. Lung inflammation and atherosclerosis Ck betal0 cDNA can
                                                                     promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betal0 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Droll/2 chemokine betall or monocyte chemotactic protein 4 variant. Human; chemokine betall; ck betall; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; heematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Droll/2 variant.
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betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also
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0; Mismatches 0; Indels
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Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,
Parmede D, White J;
Parmede D, White J;
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W22674 standard; Protein; 79 AA.
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Best Local Similarity 100.0%;
Matches 12; Conservative
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19-MAR-1998 (first entry)
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23-FEB-1996; UO2598.
23-FEB-1996; WO-UO2598.
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                                                                             16-DEC-1997 (first entry)
Stem cell mobilising chemokine CKbeta-10.
Haematopoletic cell; parasitic infection; colony stimulating factor;
haematoregulator; immune response; bacterial infection; transplant;
wound healing; bone marrow; immunosuppression; regeneration;
neoplastic disease; viral disease; gene therapy; cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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19-MAR-1998 (first entry)
Bac 1 chemokine betal0 or monocyte chemotactic protein 4 variant.
Bac 1 chemokine betal0 or monocyte chemotactic protein 4 variant.
Human; chemokine betal0, Ck betal0; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4; Bac 1 variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ten new chemokine(s) able to mobilise stem cells - used where increased levels of haematopoietic cells are required, e.g. to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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Pred. No. 1.33e-02;
0; Mismatches 0; Indels
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Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,
Parmelee D, White J;
WPI; 97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Pelus L, White JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           co-administered with a cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Kreider BL, Li H, Pelus L, White JR
WPI; 97-258956/23.
Ten new chemokine(s) able to mobilise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W22671 standard; Protein; 82 AA.
.T 6
W17665 standard; peptide; 82 AA.
                                                                                                                                                                                                                                                                                                                      01-MAX-1997.
23-OCT-1996; U16959.
24-OCT-1995; US-006051.
(SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
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23-FEB-1996; U02598.
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RESULT
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Score yo;
Pred. No. 1.33e-02;
''.matches 0; Indels

100.08;

Best Local Similarity 100.0%; Matches 12; Conservative

53 eicadpkekwvg 64

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Monocyte Chemoattractant proteins, MCP-4 and MCP-3 - used to develop products for treating e.g. cancers, infections, asthma, cystic fibroats, rinhitis, atheroscalerosis or inflammatory bowel disease claim 8; Page 53; 106pp; English.

The present sequence represents human monocyte chemoattractant protein 4 (MCP-4). The MCP-5 have activity in stimulating chemotactic cartivity. The proteins can be used for treating cancers, e.g. a lymphoma (e.g. Hodgkin's lymphoma), a plasmacytoma, a melanoma, a cartivity. The proteins can be used for treating cancers, e.g. a sarcoma, a tumour within the lung or gastrointestinal tract, or infectious disease such as ALDS or malaria. Antagonists to the proteins can be used for treating e.g. asthma, chronic obstructive pulmonary disease, cystic fibrosis, sinusitis, rhinitis, atherosclerosis, glomerulonephritis, multiple sclerosis, inflammatory bowel disease, carthitis or adult respiratory distress syndrome. Infections such as parasitic infections may also be treated with a molecule that inhibits contains on the contains and the conta
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                            monocyte chemotactic protein 4 (MCP-4) Bac I variant, which can be used to treat patients deficient in Ck betal0, while a Ck betal0 and aniagonist can be used to reduce excessive levels of Ck betal0. Ck betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betal0 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (art)agonist activity. The antiaponist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and infectious diseases, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betal0 cDNA can diffication.
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Human; monocyte chemoattractant protein; MCP-4; MCP-5; chemokine;
immune response; cancer; AIDS; malaria; parasitic infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
    The present sequence is human chemokine beta10 (Ck beta10) or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 96; DB 26; Length 82;
Pred. No. 1.33e-02;
0; Mismatches 0; Indels
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Pred. No. 1.33e-02;
0; Mismatches 0;
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WPI; 98-240080/21.
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Matches 12; Conservative
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Local Similarity 100.0%;
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30-SEP-1996; US-027128.
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Claim 1, Fig 2; 83pp; English.

The present sequence is human chemokine betal0 (CK betal0) or monocyte chemotractic protein 4 (McP-4), which can be used to treat patients deficient in CK betal0, while a CK betal0 antagonist can be used to reduce excessive levels of CK betal0. CK betal0 can be used to reduce excessive levels of CK betal0. CK betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, poriasis and neurodegenerative diseases. It also promotes wound chealing, regulates haematopoiesis and generates antibodies.

Labelled CK betal0 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. CK betal0 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
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                            19-MAR-1998 (first entry)
Human chemokine betal0 or monocyte chemotactic protein 4.
Human; chemokine betal0; Cx betal0; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Polypeptide encoding chemokine beta 4 and monocyte chemotactic
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                                                                                                                                                                  fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
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Monocyte chemotactic protein 5. MCP-5; human; macrophage;
Monocyte chemotactic protein 5; MCP-5; human; macrophage;
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23-FEB-1996; W0-002598.
23-FEB-1996; WO-002598.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH, Parmelee D, White J;
WPI: 97-45153/40.
N-PSDB; T85029.
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/label= Sig_peptide
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/label= Mat_protein
/note= "(Claim 4)"
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                                                                                                                                                                                                                                                                               Leukaemia; MCP-4.
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                                                                                                                            Claim 1; Page 36-37; 47pp; English.

This polypeptide comprises human macrophage-derived monocyte chemotactic protein-5 (MCP-5), a novel C-C chemokine. Its amino acid sequence was deduced from a cDNA clone (see T90880 and T90883) isolated from a human macrophage cDNA colorises culturing a host cell that is stably transformed or transfected with MCP-5 polynucleotide. Also claimed acts or transfected with MCP-5 polynucleotide. Also claimed is a hybridoma that produces a monoclonal antibody (MAD) that is specifically reactive with the mature MCP-5 (Or its analogues and fragments) is used to enhance the immune response in cases of required as anti-inflammatories in cases of e.g. the MAD) are useful as anti-inflammatories in cases of e.g. arthritis and crohn's disease, also for treatment of atherosclerosis, angiogenesis and tumour growth (or metastasis). The MCP-5 inhibitors can possibly also be used to reduce the damaging effects of chemo- and radio-therapy on myeloid progenitor cells, and to inhibit replication of HIV. MCP-5 can also be used to identify the creeptors) are used to modulate MCP-5 agonists and antagonists.

Sequence 98 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chemokine beta-10.

Human chemokine beta-10.

Chemokine beta-10; chemokine beta-4; Ck beta-10; Ck beta-4;

Chemokine beta-10; chemokine beta-6;

Chemokine beta-10; chemokine disease; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New chemokine (K(beta)-4 and -10 genes and polypeptide(s) - useful treat. e.g. leukaemia, solid tumours and auto-immune diseases Claim 19; Fig 2; 53pp. English.

A novel human chemokine, CK beta-10 (R93087), was identified as the product of a cDNA clone (T17050) isolated from a 9-wk early the product of a cDNA library. The protein is structurally related to the chemokine family. Recombinant Ck beta-10 can be obtd. by incorporating the cDNA into a vector and expression of the protein
                                                                                                       reatment of e.g. inflammation, atherosclerosis, angiogenesis and
                                                                                           Polynucleotide encoding monocyte chemotactic protein-5 - useful
                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 96; DB 28; Length 98;
Pred. No. 1.33e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label- Sig_peptide
25..98
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/label= Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T 11
R93087 standard; Protein; 98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN GENOME SCI INC.
Adams MD, Li H;
WPI: 96-151145/15.
N-PSDB: T17050.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-AUG-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-AUG-1994; WO-U09484.
08-SEP-1994; ZA-006936.
                         27-MAR-1996; US-622851.
                                   (ICOS-) ICOS CORP.
Godiska R, Gray PW;
WPI; 97-489645/45.
N-PSDB; T90880.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72 eicadpkekwvg 83
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23-AUG-1994; U09484
         26-MAR-1997; U04898
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein
                                                                                                                     Lumours
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receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
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in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to treat solid tumours, chronic infections, psoriasis, asthma and allergy, to regulate haematopoiesis, promote wound healing, and to inhibit angiogenesis. It can also be used to inhibit bone marrow stem cell colony formn. during chemotherapy.
                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Truncated monocyte chemoattractant profein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monocyte chemoattractant frotein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
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                                                                                                                                                                                                                             Score 96; DB 17; Length 98; Pred. No. 1.33e-02; 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monocyte chemoattractant protein analogue MCP-1 (10-76).
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Pred. No. 2.71e-02;
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W13599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W13598 standard; peptide; 66 AA.
                                                                                                                                                                                                                             / Match 100.0%;
Local Similarity 100.0%;
nes 12; Conservative
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Best Local Similarity 91.7%;
Matches 11; Conservative
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                              72 eicadpkekwvg 83
                                                                                                                                                                                                                                                                                                                                                                                                                          1 EICADPKEKWVQ 12
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                                                                                                                                                                  86
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CA2152141-A.
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                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                 Query Match
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Disclosure: Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably with 75:1 for prior art mutant 7ND.

Sequence 67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents an analogue, MCP-1 (9-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the Chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably with 75:1 for prior art mutant 7ND.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent anti-inflammatory agent claim 7; Page 5; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Monocyte chemoattractant protein analogue MCP-1 (9-76).
Truncated monocyte chemoattractant protein.1; inhibitor:
receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                        N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 93; DB 24; Length 67;
Pred. No. 2.71e-02;
1; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W13597 standard; peptide; 68 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96.98;
91.78;
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Best Local Similarity 91.7.
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                   anti-inflammatory agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41 eicadpkgkwvg 52
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Best Local Similarity
                                                                  Gong J, Lewis I;
WPI; 97-165844/16.
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WPI; 97-165844/16
                                        (LEWI/) LEWIS I.
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Job time : 20 secs.

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Gaps

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0; Indels

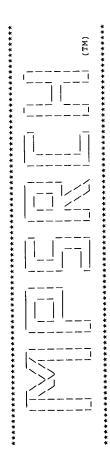
1; Mismatches

11; Conservative

Matches

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claim 4; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular The peptides can be used to prevent restenosis, e.g. in patients Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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been deleted between these residues"
4..29
5..45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
O
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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(DAND ) DANA FARBER CANCER INST INC.
Rollins B, Zhang YJ;
                                                                                                                                                                                                                    standard; protein; 69 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                        21-FEB-1996 (first entry)
                                         1 EICADPKEKWVQ 12
42 eicadpkqkwvq 53
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R87678;
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 17:45:15 2000; MasPar time 2.53 Seconds 133.995 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-66 (1-12) from US09150813.pep 95 1 EICADPTQKWVQ 12 Description: Perfect Score:

Sequence:

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

swiss-prot37 1:swissprot Database:

Mean 25.241; Variance 32.618; scale 0.774

Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Pred. No.	1.56e-09	4.97e-09	2.79e-08	2.79e-08	4.94e-08	1.54e-07	2.70e-07	2.70e-07	4.73e-07	8.27e-07	1.44e - 06	1.44e - 06	2.51e-06	7.54e-06	1.30e - 05	3.85e-05	3.85e-05	3.85e-05	3.85e-05	6.58e-05	1.12e-04	1.12e-04	1.12e-04
Description	MONOCYTE CHEMOTACTIC P			EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P		INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR								
ID	MCP3_HUMAN	MCP1_CAVPO	MCP1_HUMAN	MCP1_CANFA	MCP1_PIG	MCP2_BOVIN	MCP4_HUMAN	MCP2_PIG	MCPA_BOVIN	MCP1_RABIT	EOTA_RAT	EOTA_MOUSE	EOTA_HUMAN	MIP4_HUMAN	MCP5_MOUSE	EOTA_CAVPO	IL8_SHEEP	IL8_CANFA	IL8 PIG	MI1A_RAT	MCPB BOVIN	MI1B_HUMAN	MI1A_HUMAN
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% Query Match Length		120	66	101	66	66	98	66	66	125	97	97	97	88	104	96	101	101	103	92	74	92	92
% Query Match	100.0	97.9	94.7	94.7	93.7	91.6	90.5	90.5	89.5	88.4	87.4	87.4	86.3	84.2	83.2	81.1	81.1	81.1	81.1	80.0	78.9	78.9	78.9
Score	95	6	06	06	68	87	86	98	85	84	83	83	82	80	79	77	77	77	77	76	75	75	75
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TONSILLAR LYMPHOCYTE L MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	T-CELL SPECIFIC RANTES	T-CELL SPECIFIC RANTES	CHEMOKINE CC-1 PRECURS	MONOCYTE CHEMOTACTIC P	CHEMOKINE CC-3 PRECURS	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR	STROMAL CELL-DERIVED F	MACROPHAGE INFLAMMATOR	MACROPHAGE INFLAMMATOR	STROMAL CELL-DERIVED F	STROMAL CELL-DERIVED F	INTERLEUKIN-8 PRECURSO	INTERLEUKIN-8 PRECURSO	EMBRYO FIBROBLAST PROT	LYMPHOTACTIN PRECURSOR
MI10_HUMAN MCP2_HUMAN	MCP1 RAT	IL8 BOVIN		SISD MOUSE	SISD_RAT	CCC1_HUMAN	MCP3 MOUSE	CCC3 HUMAN	MCP1 MOUSE	MILE RABIT	MI1A MOUSE	SDF1 MOUSE	MI1B CHICK	MI1B_RAT	SDF1_HUMAN	SDF1_FELCA	IL8 HUMAN	IL8_CAVPO	EMF1_CHICK	LTN_RAT
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                                                                                                                                                                                                           PTM: O-GLYCOSYLATED. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                    MEDLINE; 97263733.
MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.; "Determination of the three-dimensional structure of CC chemokine monocyte chemoattractant protein 3 by 1H two-dimensional NMR
                                                                                                                              SPECTYOSCOPY.";
BIOCHEMISTRY 36:4412-4422(1997).
-!-FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                  KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.; "Structural characterization of a monomeric chemokine: monocyte chemoattractant protein-3.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MONOCYTE CHEMOTACTIC PROTEIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
115-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE SCYAZ OR MCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e 95; DB 1; Length 99;
I. No. 1.56e-09;
Mismatches 0; Indels
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7502E19C CRC32;
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MISSING (IN REF. 4)
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                                                                                                                                                                                                                                                                                                                                                      EMBL: X72309; -; NOT_ANNOTATED_CDS.
EMBL: X71087; G288399; -.
EMBL: X71087; G288398; ALT_INIT.
EMBL: X71087; G288397; ALT_INIT.
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 STRUCTURE BY NMR, AND SUBUNIT.
                                           chemoattractant protein-3.";
FEBS LETT. 395:277-282(1996).
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les 12; Conservative
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MIM; 158106; -.
PROSITE; PS00472: SMA
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CYTOKINE; CHEMOTAXIS
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            97053697
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Q08782;
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DISULFID
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15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC
AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                                                                                                                                           -:- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                               "CDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein.";
J. IMMUNOL. 150:5025-5023(1993).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 89165862.
FURUTANI Y., NOMINA H., NOTAKE M., OYAMADA Y., FUKUI T., YAMADA M.,
FURUTANI Y., NOMINA H., NOTAKE M., OYAMADA Y., FUKUI T., YAMADA M.,
CLARSEN C.G., OPPENHEIM J., MATSUSHIMA K.;
Cloning and sequencing of the cDNA for human monocyte chemotactic
and activating factor (MCAF).";
BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
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Pred. No. 4.97e-09;
....marches 0; Indels
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22FAD257 CRC32;
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73 BY
97 PC
13741 MW;
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91.78;
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                                                                                                 SEQUENCE FROM N.A.
STRAIN=2; TISSUE=SPLEEN;
MEDLINE; 93267104.
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34
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120 AA;
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Best Local Similarity
Matches 11; Conser
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90097880.
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LUBKOWSKI J., BUJACZ G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.; "The structure of MCP-1 in two crystal forms provides a rare example of variable quaternary interactions."; NAT. STRUCT. BIOL. 4:64-69(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ***RABANOWITZ J., HUNT D.F., APPELLA E.;
"Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions.";
PRROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DECOCK B., CONINGS R., LENAERTS J.-P., BILLAU A., VAN DAMME J.; "Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROBINSON E.A., YOSHIMURA I., LEONARD E.J., TANAKA S., GRIFFIN P.R.,
                                                                                                                                                     "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GROWENBORN A.M., CLORE G.M.; GROMENBORN A.M., CLORE G.M.; "Modeling the three-dimensional structure of the monocyte chemo-attractant and activating protein MCAF/MCP-1 on the basis of the solution structure of interleukin-8."; PROFEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo."; MOL. CELL. BIOCHEM. 126:61-68(1993).
                                                                                                                                                                                                                                                                                                                                                                                                      CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.; "Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family.";
ROLLINS B.J., STIER P., ERNST T., WONG G.G.; "The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F.,
                                                                                                                                                                                                                                                                                   SHYY Y.J., LI Y.S., KOLATTUKUDY P.E.; "Structure of human monocyte chemotactic protein gene and its
                                                                                                                  YOSHIMURA T., YUHKI N., MOORE S.K., APPELLA E., LERMAN M.I.,
LEONARD E.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YOSHIMURA T., LEONARD E.J.; "Human monocyte chemoattractant protein-1 (MCP-1)."; ADV. EXP. MED. BIOL. 305:47-56(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOCHEM. BIOPHYS. RES. COMMUN. 167:904-909(1990)
                                                                                                                                                                                                                                                                                                                                     SIOCHEM. BIOPHYS. RES. COMMUN. 169:346-351(1990).
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                                                     CELL. BIOL. 9:4687-4695(1989).
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MEDLINE; 89184525.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE;
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                                        protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chemoattractant protein-3.";
FEBS LETT. 395:277-287(1996).
FEBS LETT. 395:277-287(1996).
- PUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTE ANTI-TUMOR
BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT
OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -:- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
-:- PIM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN BOSINOPHIL CHEMOATTRACTANT.
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                   MEDILINE: 94253189.
ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
Structure/Activity analysis of human monocyte chemoattractant
protein-1 (MCP-1) by mutagenesis. Identification of a mutated protein
that inhibits MCP-1.mediated monocyte chemotaxis.";
J. BIOL. CHEM. 269:15918-15924(1994).
STRUCTURE BY NMR.
MEDLINE; 96234959.
HANDEL T.M., DOMALLE P.J.;
HANDEL T.M., DOMALLE P.J.;
"Heteronuclear (1H, 13C, 15N) NMR assignments and solution structure of the monocyte chemoattractant protein-1 (MCP-1) dimer.";
BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                 MEDLINE; 96195223.
WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A., "Deletion of the NH2-terminal residue converts monocyte chemotactic protein 1 from an activator of basophil mediator release to an ecsinophil chemoattractant.";
J. EXP. MED. 183:681-685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.; "Structural characterization of a monomeric chemokine: monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MIM; 158105; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                               EFFECT OF DELETION OF N-TERMINAL RESIDUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL, M28226; G338009; -..
EMBL, X14768; G34514; -..
EMBL, M37719; G487124; -..
EMBL, M28225; G338007; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL, M31626, G386961; -.
EMBL, M30816, G386961; JOINED.
EMBL, M31625, G386961; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M28224; G338007; JOINED. S69738; G545465;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-C) (CHEMOKINE CC).
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1MCA; 15-OCT-94
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S03339; S03339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATHEROSCLEROSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1DOL;
                                                                                                                                                                                                                                                                                       MUTAGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1DOM;
                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBUNIT.
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EMBL;
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PIR;
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PDB;
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US-09-150-813-66.rsp

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A., LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J., ROSSEN R.D., SMITH C.W., ENTMAN M.L.;
"Induction of monocyte chemoattractant protein-1 in the small veins of the ischemic and reperfused canine myocardium.";
CIRCULATION 95:693-700(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!-TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR VEINS, AND INFILTRATING LEUKOCYTES.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                        MISSING: LOSS OF ACTIVITY.
MISSING: LOSS OF ACTIVITY.
MISSING: 90% REDUCTION IN ACTIVITY.
MISSING: 83% REDUCTION IN ACTIVITY.
N->A: 90% REDUCTION IN ACTIVITY.
N->F: 95% REDUCTION IN ACTIVITY.
R->F: 95% REDUCTION IN ACTIVITY.
S->O: 40% REDUCTION IN ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM. REPERFUSED MYOCARDIUM.
-!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
                  SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                       Y->D: LOSS OF ACTIVITY.
R->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
                                                   MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
CARNIVORA; FISSIPEDIA; CANIDAE; CANIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                  PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                        Length 99;
                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 2.79e-08;
                                                                                                                                                                                                                                                                                                                       5355B695 CRC32;
                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101 AA.
                                                                                                                 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                   Score 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE-JUGULAR VEIN ENDOTHELIAL;
MEDLINE; 97176620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-1996 (REL. 34, CREATED)
                                                                                                                                                                                                                                                                                                                     11025 MW;
                                                                                                                                                                                                                                                                                                                                                   94.78;
                                                                                                                                                                                                                                                                                                                                                                  Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C-C) (CHEMOKINE CC).
 PFAM; PF00048; i18; 1. CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCYA2 OR MCP1.
CANIS FAMILIARIS (DOG).
                                                                                                                                                                                                                                                                                                                                                                                                                              73 EICADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                  99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP1_CANFA
P52203;
                                                                                           DISULFID
CARBOHYD
                                                                              DISULFID
                                                                                                                                                                        MUTAGEN
MUTAGEN
MUTAGEN
                                                                                                                                                                                                                                                                                                                  SEQUENCE
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                                                                                                                           VARIANT
MUTAGEN
                                                           MOD_RES
                                                                                                                                                       MUTAGEN
                                                                                                                                                                                                                                       MUTAGEN
MUTAGEN
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                                 SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.; "Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): analysis by polymerase chain reaction and cDNA cloning."; BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZACH O.R.F.;
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAŽOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                       MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                            Score 90; DB 1; Length 101;
Pred. No. 2.79e-08;
0; Mismatches 1; Indels
                                                                                                                                                                                                Length 101;
                                                        CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                   A7075B14 CRC32;
                                                                                                                     SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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BY SIMILARITY.
                                                                              BY SIMILARITY
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EMBL; U29653; G1144186; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. 
PFAM; PF00048; 118; 1. 
HSSP; P13500; 1DON.
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                                                                                                                                   34 59 B
35 75 B
101 AA; 11121 MW;
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                                                                                                                                                                                             94.78;
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                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                           23
101
24
                                                                                                                                                                                                                                                    73 EICADPKOKWVQ 84
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                                                                                                                                                                                                           Best Local Similarity
Matches 11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 94183284.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                               SUS SCROFA (PIG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEUTROPHILS
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                                                                                                                                                                                                                                                                                                                                         MCP1_PIG
P42831;
                                                                                                                               DISULFID
                                                                                                                                                 DISULFID
                                                                                                                                                              SEQUENCE
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                                                                                                     MOD_RES
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                                                                         SIGNAL
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                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 94114084.
WEMPE F., HARES J., SCHEIT K.H.;
"Cloning of the gene for bovine monocyte chemoattractant protein-2.";
DNA CELL BIOL. 13:1-8(1994).
-!- FUNCTION: CHEMOTACTIC FACTOR THAI ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                         Gaps
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                                                                                                                                                                                                                                                                                                         ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE;
                                                                                                                                                                                                                                                                            BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
SCYAI3 OR MCP4 OR NCC1.
                                                                                                                                                                      Q09141;
01-NOV-1995 (REL. 32, CREATED)
1-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUD-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
CHEMOATTRACTANT PROTEIN 2).
Score 89; DB 1; Length >>, Pred. No. 4.94e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                red. No. 1.54e-07;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9BA2CD26 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98 AA.
                                                                                                                                                          99 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; S67954; E118856; -.
EMBL; S67956; G544997; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                           PRT;
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35 75
99 AA; 10900 MW;
         93.7%;
ilarity 83.3%;
Conservative
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75.0%;
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                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-C) (CHEMOKINE CC).
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                                                                   73 EICAEPKOKWVO 84
                                                                                               1 EICADPTOKWVO 12
                     Best Local Similarity
Matches 10; Conserv
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Best Local Similarity
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Q99616;
                                                                                                                                                          MCP2_BOVIN
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            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FUNDQLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE.
(LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                          UGUCCIONI M., LOETSCHER P., FORSSMANN U., DEWALD B., LI H., LIMA S.H., LI Y., KREIDER B., GAROTTA G., THELEN M., BAGGIOLINI M.;
LI Y., KREIDER B., GAROTTA G., THELEN M., BAGGIOLINI M.;
"Monocyte chemotactic protein 4 (MCP-4), a novel structural and functional analogue of MCP-3 and eotaxin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
--- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
--- EDASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                       GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N., LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;
"Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3.";
J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 97341179.
BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N.,
BERKHOUT T.A., SARAU H.M., BRANNER M., MAKWANA J., FOLEY J.J.,
SCHELBAUM E., REAPE T.J., BRANNER M., MACHTHEWS J., O'DONNELL K.,
SCHAIDL D.B., IMBURGIA C., MACNULE C.;
O'SHANDRESY D., SCOTT M., GROOT P.H.E., MACPHEE C.;
"Cloning, in vitro expression, and functional characterization of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine receptor 2B.";
                     VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND SEQUENCE OF 17-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
                     EUKARYOTA; METAZOA; CHORDATA; VERTEBRA
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                J. EXP. MED. 183:2379-2384(1996).
                   CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-C) (CHEMOKINE CC).
HOMO SAPIENS (HUMAN).
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                                                                                   SEQUENCE FROM N.A.
                                                                                                                          MEDLINE; 97113354.
                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 96235049.
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                                                                                                                                                                                                                                                                                                                                          TISSUE=FETAL
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                                                                                                      TISSUE-HEART
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): analysis by cDNA cloning and northern analysis.";
BIOCHEM. BIOPHYS. RES. COMMUN. 205:148-153(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SUBDNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                               SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŠEQUENCE FROM N.A.
MEDLINE; 95091716.
HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., WUTTKE W.W.,
SCHEIT K.K.;
                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                   MCP2_PIG STANDARD; PRT; 99 AA.
P49873;
01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOALTIC PROFEIN 2 PRECURSOR (MCP-2) (MONOCYTE CHEMOATTAGGGANT PROTEIN 2).
                                                                                                                                                                         PYRROLIDONE CARBOXYLIC ACID. BY SIMILARITY. BY SIMILARITY.
                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                           Score 86; DB 1; Length 98; Pred. No. 2.70e-07;
                                                                                                                                                                                                                               DF52F6EC CRC32;
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B7620BCF CRC32;
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                        1; Mismatches
or send an email to license@isb-sib.ch).
                      EMBL; U46767; G1732123; --
EMBL; AC002482; G2340091; --
EMBL; X98306; E248571; --
MIM; 601391; --
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; Z48480; G683719; -.
PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NVV.
                                                                                                                                                                                                                   POTENTIAL.
                                                                                                                                                                                                                               10986 MW;
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                                                                                                                                                                                                                                                                          83.3%;
                                                                                                                                                                                                                                                                                        10; Conservative
                                                                                               PFAM; PF00048; i18; 1.
HSSP; P13500; 1DOL.
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                                                                                                                             CYTOKINE; CHEMOTAXIS;
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                                                                                                                                                                                                                                                                         Local Similarity
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DISULFID
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CARBOHYD
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DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
TISSUE-SEMINAL PLASMA;
MEDLINE; 92181448

"Characterization by CDNA cloning of the mRNA of a new growth factor from bovine seminal plasma: acidic seminal fluid protein.";
BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-SEMINAL PLASMA;
MEDLINE, 292064117.
WEMPE F. HENSCHEN A., SCHEIT K.H.;
"Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).";
DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WEMPE F., KUHIMANN J.K., SCHEIT K.H.; "Characterization of the bovine monocyte chemoattractant protein-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS.
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PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
C8F5821D CRC32;
Score 86; DB 1; Length 99;
Pred. No. 2.70e-07;
"...matches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             99 AA.
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BMEL; M84602; G163395; -.
PIR; A39296; A39296.
PIR; JC2336; JC220048; JC2200048; JC2200048; JC2200048; JC22000048; JC22000048; JC22000048; JC22000048; JC22000048; JC22000048; JC22000048; JC2200000048; JC22000048; JC2200048; JC2
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                              Query Match 90.5%;
Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
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1 EICADPTQKWVQ 12
                                                                                                                                                                                                73 EVCADPOOKWVQ 84
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MEDLINE; 94338337.
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MCPA_BOVIN
P28291;
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US-09-150-813-66.rsp

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CHAIN
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                                                                                                                                                                                                                                                                                                                                                              this SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstationthe European Bioinformatics Institute. There are no restrictions on its modified morphofit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                           -:- SUBCNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                               YOSHIMONE T., TUTKI N.;
NEUTIOPHIL attractant, activation protein-1 and monocyte chemoattractant protein-1 in rabbit. cDNA cloning and their expression in spleen cells.";
J. IMMUNOL. 146:3483-3488(1991).
J. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                              ö
                                                                                                                                                                              ORYCTOLAGUS CUNICULUS (RABBIT).
EUKRRYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 84; DB 1; Length 125;
Pred. No. 8.27e-07;
0; Mismatches 1; Indels
                             1; Indels
          Length 99;
                                                                                                                                01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
           Score 85; DB 1; LA Pred. No. 4.73e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL. FBAC9D27 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
POTENTIAL.
                               1; Mismatches
                                                                                                              125 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
MEDLINE; 91225489.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59 BY
75 BY
40 PO
55 PO
112 PO
13776 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EOTA_RAT STANDARD; F p97545; 008780; 15-JUL-1998 (REL. 36, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 90.9%;
Matches 10; Conservative
           y Match 89.5%;
Local Similarity 83.3%;
hes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; M57440; G165470; -
                                                                                                                                                                                                                                                                                                                                                  C-C) (CHEMOKINE CC).
                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
125
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE; CHEMOTAXIS;
                                                                       1 EICADPTOKWVO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74 ICADPKOKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 ICADPTOKWVO 12
                                                     73 ELCADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125 AA;
                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                              MCP1_RABIT
P28292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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             Query Match
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                                   Matches
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                                                                                                                                                                                                                                                                                                                                                                                                      SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

I FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).

-! SENDELLULAR LOCATION: EXTRACELLULAR.

-! PTM: O-GLYCOSYLATED (PORDBABLE).

-! SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
BOTAXIN PRECURSOR (ESSINOPHIL CHEMOTACTIC PROTEIN).
RATTUS NORVEGICUS (RAT).
EUKARYOTA: METAZOA; CHORDAȚA; VERTEBRAȚA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROTHENBERG M.E., LUSTER A.D., LEDER P.; "Murine ectaxin: an ecsinophil chemoattractant inducible in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                  WILLIAMS C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C.,
                                                                                                                                                                                                                                                                                       SUBMITTED (DEC-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
6
                                                                                                                                                  RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 83; DB 1; L. Pred. No. 1.44e-06; 0; Mismatches 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L -> S (IN REF. 30584ED45 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PSO0472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             larity 83.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; Y08358; E274141; -. EMBL; U96637; G2098785; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71 EICADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EICADPTOKWVQ 12
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                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                     FLANAGAN B.F
                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EOTA_MOUSE
P48298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
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                                                                                                               STRAIN=CS7BL/6J; TISSUE=LUNG; MEDLINE; 96158746. GONZALO J.A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., KOPF M.,
                                                                                                                                                                                                                                                                                                                                                                          -I-FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EGSINOPHILS (A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACROPHAGES ON NEUTROPHILS.
-I-SUBGELLULAR LOCATION: EXPRESSED CONSTITUTIVELY IN THE THYMUS. EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHELIAL CELLS), INTESTINE, HEARY, SPLEEN, KIDNEY.
-I-INDUCTION: BY INTERREROW-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-I-PUNICOLAR PROBABLE).
-I-SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
   endothelial cells and in interleukin 4-induced tumor suppression."; PROC. NATL. ACAD. SCI. U.S.A. 92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                     GUTIERREZ-RAMOS J.-C.;
"Mouse eotaxin expression parallels eosinophil accumulation during
lung allergic inflammation but it is not restricted to a Th2-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , DB 1; Leny...
.. 1.44e-06;
... ... 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 96181758.
GARCIA-ZEPEDA E.A., ROTHENBERG M.E., OWNBEY T.R., LEDER P.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ECTA_HUMAN STANDARD; PRT; 97 AA. P51671; P50877; Q92490; Q92491; O1-CT-1996 (REL. 34, CREATED) (1-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE) 15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE) ECTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
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BY SIMILARITY.
F85A96BC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EOTAXIN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MGD; MGI:103576; SCYALI, PROSITE; PS00472; SMALL, PFAM; PF00048; 118; 1. HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                          IMMUNITY 4:1-14(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EOSINOPHIL; CYTOKINE; INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71 EICADPKKKWVQ 82
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| EICADPTQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
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SEQUENCE
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RANGE OF THE STANDARD OF THE S
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                                                                          SEQUENCE FROM N.A.
MEDLINE; 96189937.
PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., KASSAM N.,
SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.C.,
"Human eotaxin is a specific chemoattractant for eosinophil cells and provides a new mechanism to explain tissue eosinophilia."; NAT. MED. 2:449-456(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Genomic organization, complete sequence, and chromosomal location of the gene for human eotaxin (SCYAll), an eosinophil-specific {\tt CC}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRUMP M.P., RAJARATHNAM K., KIM K.S., CLARR-LEWIS I., SYKES B.D.;
"Solution structure of eotaxin, a chemokine that selectively recruits
eosinophils in allergic inflammation.";
BIOCHEMISTRY 37:11670-11678(1998).
-! FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN
EIRCTLY PROMOTES THE ACCUMILATION OF EOSINOPHILS, A PROMINENT
FRATURE OF ALLERGIC INFLAMMATORY REACTIONS.
-! SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- PTM: O-GLYCOSYLATED (PROBABLE).
-!- INDUCTION: BY TNF-ALPHA, IL-1-ALPHA AND INTERFERON GAMMA.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                  Expression, receptor binding, and functional properties suggest a mechanism for the selective recruitment of eosinophils."; J. CLIN. INVEST. 97:604-612(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genomic organization, sequence, and transcriptional regulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 97445071.
HEIN H., SCHLUETER C., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-PLACENTA;
MEDLINE; 97312708.
GARCIA-ZEPEDA B.A., ROTHENBERG M.E., WEREMOWICZ S., SARAFI M.N.,
MORTON C.C., LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                           MEDILING; JULYSOU.;
KITAUTA M., NARAJIMA T., IMAI T., HARADA S., COMBADIERE C.,
TIFFANY H.L., WURPHY P.M., YOSHIE O.;
"Molecular cloning of human ectaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil ectaxin receptor. CC chemokine receptor 3.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BARTELS J., SCHUDETER C., RICHTER E., NOSO N., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.;
"Human dermal fibroblasts express cotaxin: molecular cloning, mexpression, and identification of ectaxin sequence variants.";
BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
                                                                                                                                                                           "Cloning of the human eosinophil chemoattractant, eotaxin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the human ectaxin gene.";
BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                receptor, CC chemokine receptor 3.7
J. BIOL. CHEM. 271:7725-7730(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                   TISSUE=SMALL INTESTINE;
MEDLINE; 96205964.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 96374440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemokine.
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Matches
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                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic for T lymphocytes, but not for monocytes.";
J. IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN UPDATE)
ACTIVATION REGULATED CHEMOKINE) (CC CHEMOKINE PARC)
ACTIVATED MACROPHAGE ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.

TISSUE-AORTA, AND LUNG;

MEDLINE: 97376836.

HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,

NAKAGAWA T., TSUBUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,

MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.;

"A novel human CC chemokine PARC that is most homologous to
                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                          Score 82; DD .,
Pred. No. 2.51e-06;
Pred. no. 2.51e-05;
                                                                                                                                       EOSINOPHIL, CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL; INFLAMMATORY RESPONSE; POLYMORPHISM; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIJNE; 97275308.
WELLS T.N.C., PEITSCH M.C.;
"The chemokine information source: identification and
                                                                                                                                                                                               L -> P (IN CLONE 34).
A -> T (IN CLONE 53).
R -> S (IN CLONE 34).
K -> R (IN CLONE 54).
C -> R (IN CLONE 53).
GCOF3D98 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LI H., RUBEN S.; "Macrophage inflammatory protein-3 and -4."; PATENT NUMBER US5504003, 02-APR-1996.
                                                                                                                                                                                                                                                                                                                                                           89 AA.
 or send an email to license@isb-sib.ch).
                                                                                                            PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                     EOTAXIN.
                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                        10732 MW;
                            EMBL, U34780; GI185440; -...
EMBL, D49372; GI552241; -...
EMBL, Z69291; E221070; -...
EMBL, Z75669; E251275; -...
EMBL, U46572; G2088509; -...
                                                                                                                                                                                                                                                           86.3%;
75.0%;
                    EMBL; U46573; G1280141; -. EMBL; U34780; G1185440; -.
                                                                                                                                                                                                                                                                              Conservative
                                                                                         Z92709; E329504; -.
                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISCUSSION OF SEQUENCE.
                                                                                                                                                             23
23
73
73
                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
                                                                                                                    PFAM; PF00048; il8; 1
PDB; 2EOT; 11-NOV-98.
                                                                                                                                                                                                                                                                                                  71 DICADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                     1 EICADPTOKWVO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                          97 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA18 OR MIP4
                                                                                                   MIM; 601156;
                                                                                                                                                                                                                                                                                                                                                           MIP4_HUMAN
P55774;
                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                       VARIANT
                                                                                                                                                                                                    VARIANT
                                                                                                                                                                                                              VARIANT
                                                                                                                                                                                                                                 VARIANT
                                                                                                                                                                       CHAIN
                                                                                          EMBL;
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-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES, AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
                                                                                                                                                                                                                                                                  -:- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                         IN THE LUNG. A LOWER
                           expressed sequence tag databases.";
J. LEUKNOC. BIOL. 61:145-550(1997).
-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT
MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION
INTO B CELL FOLLICLES IN LYMPH NODES.
-1- TISSUE SPECIFICITY: SPERESSED AT HIGH LEVELS IN THE LUNG. A LOWER
LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GONZALO J.A., LLOYD C., KREMER L., LU L., MARTINEZ A.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Murine monocyte chemoattractant protein (MCP)-5: a novel CC chemokine that is a structural and functional homologue of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP-5) (MCP-1 RELATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation."; J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MACROPHAGE INFLAMMATORY PROTEIN 4.
BY SIMILARITY.
BY SIMILARITY.
052AADC CRG32;
characterization of novel chemokines using the WorldWideWeb and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SARAFI M.N., GARCIA-ZEPEDA E.A., MACLEAN J.A., CHARO I.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 80; DB 1; Louis Pred. No. 7.54e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WERSHIL B.K., GUTIERREZ-RAMOS J.C.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AB000221; D1022520; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89 AA; 9849 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84.2%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                             C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                          THYMUS AND APPENDIX.
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PFAM; PF00048; il8; 1.
HSSP; P13236; 1HUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; Y13710; E321838;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 QICADPNKKWVQ 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EICADPTQKWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
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JIA G.-Q., GONZALC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCYA12 OR MCP5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MCP5_MOUSE
Q62401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHEMOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PLYOTAL ROLE DURING EARLY STRGES OF ALLERGIC LUNG INFLAMMATION.

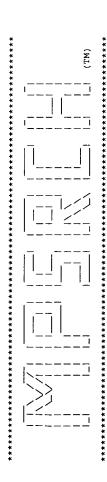
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).

-!- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND THYMUS, ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES, BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

-!- INDUCTION: BY IFW-GAMMA AND LIPOPOLYSACCHARIDE (LPS).

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC) (CHEMOXINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 79; DB 1; Length 104; Pred. No. 1.30e-05; 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
1 O8FA6C35 CRC32;
                                                                                                                                                                                                                                                                                                                                  EMBL; U50712; G1477582; --
EMBL; U66670; G1881583; --
MGD; MGI:108224; SCYA12.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DOL.
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATO!
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23 104 MOI
33 58 BY
34 74 BY
104 AA; 11659 MW; (
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Best Local Similarity 81.8%;
Matches 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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Search completed: Fri Feb 4 17:45:21 2000 Job time : 6 secs.



Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:44:36 2000; MasPar time 3.60 Seconds 133.704 Million cell updates/sec Tabular output not generated.

Run on:

>US-09-150-813-66 (1-12) from US09150813.pep 95

1 EICADPTQKWVQ 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

122810 seqs, 40068593 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

pir60 1:pirl 2:pir2 3:pir3 4:pir4 Database:

Mean 24.523; Variance 35.756; scale 0.686 Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	ouery Match Length	DB	ID	Description	Pred. No.
: :	95	100.0	109	7	A54678	monocyte chemotactic	3.20e-08
7	93	97.9	120	7	148147		9.07e-08
m	90	94.7	66	~	A60299		4.27e-07
4	89	93.7	66	7	JC2136	chemoattra	7.13e-07
2	98	90.5	66	7	JC2417	monocyte chemoattract	3.28e-06
9	82	89.5	66	7	A39296	monocyte chemoattract	5.44e-06
7	82	89.5	66	7	JC2336	monocyte chemoattract	5.44e-06
ω	84	88.4	125	~	I46857	monocyte chemoattract	8.99e-06
σ	79	83.2	46	7	JC4912	eotaxin precursor - h	1.07e-04
10	77	81.1	95	7	JN0841	interleukin-8 - dog	2.85e-04
11	77	81.1	96	7	JC2478	eotaxin precursor - r	2.85e-04
12	77	81.1	96	7	I48099	eotaxin precursor - g	2.85e-04
13	77	81.1	101	7	146997	interleukin-8 - sheep	2.85e-04
14	77	81.1	101	7	S42496	interleukin 8 - sheep	2
15	77	81.1	103	7	A53096	interleukin-8 precurs	2.85e-04
16	77	81.1	103	~	A44253	alveolar macrophage c	2.85e-04
17	16		92	~	152322	macrophage inflammato	4.63e-04
18	75	78.9	20	7	C60407	monocyte adherence-in	7.49e-04
19	75	٠	92	Η,	A31767	macrophage inflammato	7.49e-04
20	75	78.9	92	7	A30574	macrophage inflammato	7.49e-04
21	75	•	93	7	B35673	LD78-beta protein pre	7.49e-04
22	75	78.9	66	7	JC5295	monocyte chemotactic	7.49e-04
23	75	78.9	148	7	507723	immediate-early serum	7.49e-04

1.95e-03 1.95e-03 1.95e-03 1.95e-03 1.27e-02 2.02e-02 2.02e-02 2.02e-02 2.02e-02 2.02e-02 3.19e-02 3.19e-02 3.19e-02 3.19e-02 5.7e+00	
interleukin-8 - rabbi monocyte chemoattract PDGF-inducible JE gly immune activation gen macrophage inflammato lymphocyte and monocy pre-Brcall growth-sti interleukin-8 homolog cytokine - mouse cytokine SPF-1-beta - interleukin-8 precurs Neutrophil attractant RSV-induced protein - transformation-induce monocyte chemoattract lymphotactin precurso macrophage inflammato gene C10 protein - mo lymphotactin precurso molocyte chemoattract lymphotactin precurso monocyte chemoattract lymphotactin precurso monocyte chemoattract lymphotactin precurso molocyte chemoattract lymphotactin precurso molocyte chemoattract lymphotactin precurso lymphotactin precurso	•
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7 C C C C C C C C C C C C C C C C C C C	
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ALIGNMENTS

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#journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
and expression of the recombinant protein.
#cross-references MuID:93267104
#accession 148147
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Biochem. Biophys. Res. Commun. (1990) 169:346-351
Structure of human monocyte chemotactic protein gene and its
regulation by TPA.
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monocyte chemoattractant protein 1 precursor - human
GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF;
MCP-1; monocyte chemotactic factor 1; monocyte secretory
protein; tumor-derived chemotactic factor 2;
glioma-derived chemotactic factor 2 (GDCF-2)
                                                                                          predicted #label SIG\
                                                                                                            #product monocyte chemotactic protein 3 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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20-Feb-1993 #text_change
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                                                                                                                                                                            predicted
#length 109 #molecular-weight 12356 #checksum 1535
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Pred. No. 3.20e-08;
0; Mismatches 0; Indels
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Pred. No. 9.07e-08;
1; Mismatches 0; Indels
                        #superfamily macrophage inflammatory protein
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##cross-references GB:L04985; NID:9349820; PID:9349821
                                                                                          #domain signal sequence #status
                                             cytokine; glycoprotein; inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                              #type complete
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Local Similarity 100.0%;
hes 12; Conservative
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Best Local Similarity 91.7%;
Matches 11; Conservative
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  36/1; 75/2
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##molecule_type DNA
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FEATURE
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Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
M.I.; Leonard, E.J.
FEBS Lett. (1989) 244:487-493
Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene US.
                                                                                           Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a monocyte secretory
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A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemoattractant protein-1/monocyte chemotactic and
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Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, K.
#journal Biochem. Biophys. Res. Commun. (1989) 159:249-255
Cloning and sequencing of the cDNA for human monocyte
chemotactic and activating factor (MCAF).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ##molecule_type mRNA
#stresidues
1-99 ##label YOS
##cross-references GB:X14768; NID:934513; PID:934514
##experimental_source glioma cell line U-105MG
#strences Yoshimura, T.; Leonard, E.J.
#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#ccession 151841
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##cross-references GB:M37719; NID:g187447; PID:g487124
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#accession A32000
##molecule_type protein
'X',25-99 ##label ROB
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##residues 1-99 ##label YO2
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##residues 1-99 ##label FUR
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#accession 803339
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#accession A32396
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                   Damme, J.
Biochem. Biophys. Res. Commun. (1990) 167:904-909
Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel
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Mol. Cell. Biochem. (1993) 126:61-68
The expression of monocyte chemotractic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
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#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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#journal Biochem. Biophys. Res. Commun. (1994) 199:962-968
#title Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
and cDNA cloning.
#cross-references MUID:94183284
#accession JC2136
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#product monocyte chemoattractant protein 1 #status
experimental #label MAT\
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#modified_site pyrrolidone carboxylic acid (Gln) (in
mature form) #status experimental\
Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van
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predicted
#length 99 #molecular-weight 11025 #checksum 7984
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#map_position 17411.2-17412
CLASSIFICATION #superfamily macrophage inflammatory protein
KEYWORDS cytokine; glycoprotein; inflammation; pyroglutamic acid
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Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR. cloning and sequencing of human monocyte
chemoattractant protein-1 (MCP-1) gene.
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NCE JC1096
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Pred. No. 4.27e-07;
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#cross-references MUID:90211336
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##residues 1-99 ##label LIY
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#accession I57488
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Best Local Similarity 91.7%;
Matches 11; Conservative
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JC2136; S57498
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monocyte chemoattractant protein-2 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
17-Mar-1999
                                                                                                                                                                                                                                                           #domain signal sequence #status predicted #label SIG\
#product monocyte chemoatractant protein-1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
#length 99 #molecular-weight 10976 #share...
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Scheit, K.H.
Biochen. Biophys. Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
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##cross-references EMBL:X79416; NID:g872312; PID:g872313
FICATION #superfamily macrophage inflammatory protein
                                                                Zach, O.
submitted to the EMBL Data Library, July 1994
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Pred. No. 7.13e-07;
....matches 1; Indels
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Pred. No. 3.28e-06;
1; Mismatches 1; Indels
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##residues 1-99 ##label HOS
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Best Local Similarity 83.3%;
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Matches 10; Conservative
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #text_change
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#product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#authors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).
#accession A39296
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#formal_name Oryctolagus cuniculus #common_name domestic
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
protein-1 gene.
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##cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
cession B39296
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Pred. No. 5.44e-06;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                         ##residues 50-68,'X',70-74,'X',76 ##label WE2
##experimental_source seminal vesicle
FICATION #superfamily macrophage inflammatory protein
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#length 99 #mole
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#cross-references MUID:94338337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         larity 83.3%;
Conservative
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Best Local Similarity 83.3%;
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                                                                                                                                      ##molecule_type mRNA
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| EICADPTQKWVQ 12
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| EICADPTQKWVQ 12
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#authors Yoshimura, T.; Yuhki, N.
#journal J. Immunol. (1991) 146:3483-3488
#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.
#cross-references MIID:91225489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroeder, J.M.
Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular cloning, mRNA expression, and identification of ectaxin sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ##cross-references EMBL:Z75668; NID:g1531982; PID:e251275; PID:g1531983
##experimental_source dermal fibroblast
This protein has eosinophil specific chemotatic activity.
FICATION #superfamily macrophage inflammatory protein fibroblast.
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                                                                                                                                                                                                                                                                                                                                                                 Gaps
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#formal_name Homo sapiens #common_name man
01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change
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#formal_name Canis lupus familiaris #common_name dog
19-May-1994 #sequence_revision 19-May-1994 #text_change
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#length 125 #molecular-weight 13776 #checksum 4498
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Gene (1993) 131:305-306
Cloning of a canine gene homologous to the human interleukin-8-encoding gene.
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#length 97 #molecular-weight 10790 #checksum
                                                                                                                                                             preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                     Length 125;
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83.2%; Score 79; DB 2; Length 97;

Best Local Similarity 66.7%; Pred. No. 1.07e-04;

Matches 8; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                             ##molecule_type mRNA
##residues 1-125 ##label YOS
##cross_references GB:M37440; NID:9165469; PID:9165470
                                                                                                                                                                                                                                                                                                                88.4%; Score 84; DB 2; Le
larity 90.9%; Pred. No. 8.99e-06;
Conservative 0; Mismatches 1;
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##residue=
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#title Constitutive and allergen-induced expression of eotaxin mRNA in the guinea pig lung.
#cross-references MID:9517389
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T This protein is identified as a potent eosinophil chemoattractant.
FICATION #superfamily macrophage inflammatory protein glycoprotein
DS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Jose, P.J.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman,
N.; Wells, T.N.C.; Williams, T.J.; Power, C.A.
#journal Biochem. Biophys. Res. Commun. (1994) 205:788-794
Ectaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
#cross-references MuID:95091818
#accession JC2478
                                                   sidues 1-95 ##label ISH
This protein is a polymorphonuclear leukocyles chemotactic factor
and is involved in the host defense function.
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#product eotaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
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                                                                                                                                                                                                                                                                                                                                                                                                        eotaxin precursor - rat
#formal_name Rattus norvegicus #common_name Norway rat
21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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                                                                                                                                                                                                                                        2; Indels
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#cross-references MUID:94010328
#accession JN0841
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Best Local Similarity 66.7%;
Matches 8; Conservative
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                                  ##molecule_type DNA
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#authors Seow, H.F.; Yoshimura, T.; Wood, P.R.; Colditz, I.G.
#journal Immunol. Cell Biol. (1994) 72:398-405
#title Cloning, sequencing, expression and inflammatory activity in skin of ovine interleukin-8.
#cross-references_MUID:95137691
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#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
09-May-1997
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#formal_name Ovis orientalis aries, Ovis ammon aries
#common_name domestic sheep
#common_name domestic sheep
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
                                                                        ##cross-references EMBL:U18941; NID:9687655; PID:9687656
CLASSIFICATION #superfamily macrophage inflammatory protein
SUMMARY #length 96 #molecular-weight 10753 #checksum 7236
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##residues
1-101 ##Ercoss-references EMB1:X78306; NID:9463253; PID:9463254
##CATION #superfamily beta-thromboglobulin
X #length 101 #molecular-weight 11292 #checksum 294
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##status preliminary; translated from GB/EMBL/DDBJ
##molecule_type mRNA
##residues 1-96 ##label RES
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Pred. No. 2.85e-04;
0; Mismatches 2; Indels
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##cross-references GB:S74436; NID:g786590; PID:g786591
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##molecule_type mRNA
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llarity 81.8%; l
Conservative
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Ab3096 #type complete interleukin-8 precursor - pig #formal_name Sarofa domestica #common_name domestic pig 02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change A53096 A53096
                                                                                                                                                                                                                                                                                                   #authors Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, M.J.; Weiss, D.J.; Murteaugh, M.P.

# Journal J. Biol. Chem. (1994) 265:77-85
#title Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
#cross-references MUID:94103307
#accession A53096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##status preliminary
##molecule_type mRNA
##residues 1-103 ##label LIN
##rcssfues GB:M86923; NID:g164520; PID:g164521
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 103 #molecular-weight 11633 #checksum 8835
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Best Local Similarity 66.7%; Pred. No. 2.85e-04;
Matches 8; Conservative 2; Mismatches 2; Indels
  75 EVCLDPKEKWVQ 86
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| EICADPTQKWVQ 12
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Search completed: Fri Feb 4 17:44:58 2000 Job time: 22 secs.

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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:44:01 2000; MasPar time 3.51 Seconds 72.692 Million cell updates/sec Run on:

not generated. Tabular output

>US-09-150-813-66 (1-12) from US09150813.pep 95 1 EICADPTQKWVQ 12 Title: Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

170751 seqs, 21266608 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

Database:

a-geneseq35
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
8:part8 9:part9 10:part10 11:part11 12:part13 14:part14 15:part15 16:part16 17:part17 18:part18
14:part14 15:part15 16:part16 17:part17 18:part18
19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 32:part32 33:part33 34:part34 35:part35 36:part36 37:part37 38:part38

Mean 18.261; Variance 66.240; scale 0.276 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Pred. No	11.766 1.766	
Description	Human monocyte chemoa Chemoattractant prote Cytokine encoded by c Monocyte chemoattract Monocyte chemoattract Monocyte chemoattract des(2-8) MCP-1. Monocyte chemoattract (3-Ala) MCP-1. Monocyte chemoattract (3-Ala) MCP-1. Monocyte chemoattract Monocyte chemoattract Monocyte chemoattract Mature human monocyte Mature human monocyte Macrophage chemoattra Sense MCP-1.	
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Result No.	100 88 4 3 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

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Gaps

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Score 95; DB 14; Length 67; Pred. No. 1.76e-02; 0; Mismatches 0; Indels

Query Match 100.0%; Best Local Similarity 100.0%; Matches 12; Conservative

41 eicadptgkwvg 52 |||||||||||||

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MCF. (24-Arg) MCP-1. Mature MCP-1. Mature MCP-1. Human monocyte chemoa 5.67e-02 Human monocyte chemoa 5.67e-02 MCF. Chemoattractant prote 5.67e-02 Chemoattractant prote 5.67e-02 Chemoattractant prote 5.67e-02 Drol3+ chemokine betal 1.43e-01 Bac 3 chemokine betal 1.43e-01 Bac 1 chemokine betal 1.43e-01 Bac 1 chemokine betal 1.43e-01 Bac 1 chemokine betal 1.43e-01 Monocyte chemoatine betal 1.43e-01 Human monocyte chemoa 1.43e-01 Human chemokine betal 1.43e-01 Sequence of bovine P6 Se	ant factor hMCP-3. ant factor, hMCP-3; chemokine; vaccine; us antigenic sequence; MRHAS; RV-1; atment; prophylactic; bacterial; corresp. to homologous antigenic lagents and on chemokine(s), used for noingitis. an moncyte chemoattractant factor hMCP-3. related antigenic sequences (MRHAS) claimed are recognised by a monoclonal antibody virus (RY)-1. The claimed antigenic sequences (MRHAS) claimed are recognised by a monoclonal antibody virus (RY)-1. The claimed are recognised by a monoclonal antibody virus (RY)-1. The presence of bacterial to diagnose the presence of bacterial nts in a sample, or in prophylactic and thments. The peptides may also be used as corresponding MRHAS peptides.
R28660 R86859 R86859 R40114 R73910 R73910 R72650 R726600 R726600 R72600 R72600 R72600 R72600 R72600 R72600 R72600 R72600 R726000 R72600 R72600 R72600 R72600 R72600 R72600 R72600 R72600 R726000 R726	ALIGNME Totein; 67 AA. t entry) moattractant fac moattractant fac homologous anti osis; treatment; 6. 7499. E D. styne D; corresp. antibo peptide(s) corres and viral agent and viral agent enting meningitis. 98pp; English. Okine Human mono okine Human mono ningitis related 08, which are re Rubella virus (rubassays to dian gitts agents in gitts treatments. matching corresp
3314 - 27	ry) (ry) (racquesp (rodde (
68869999999999999999999999999999999999	ALIGNMENTS 5 standard; protein; 67 AA. 5; c-1995 (first entry) monocyte chemoattractant factor; gitis related homologous antigenic oassay; diagnosis; treatment; prop; sapiens. sapiens. 8-1994; CA0516. P-1994; CA0516. P-1995; CA0516. P-1996; CA0516. P-
44444444000000000000000000000000000000	(fi) (fi) (fi) (fi) (fi) (fi) (fi) (fi)
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Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-801. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVil392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
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/label= signal
/note= "includes 3 potential initiation sites"
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0
                                                                        Chemoattractant protein MCP-3. MCP-3; chemoattractant; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
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This protein is encoded by the NC28 clone isolated from peripheral blood mononuclear cells stimulated with phorbol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-NOV-1992 (first entry)
Cytokine encoded by clone NC28.
Cytokine; plasmid pSE1; HTLV-1; human T-lymphocyte virus; mouse; alpha-globin; E.coli cloning vector; ss.
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Pred. No. 1.76e-02;
0; Mismatches 0; Indels
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/label- N-glycosylation
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R24353 standard; Protein; 109 AA.
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/label= cytokine
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R70801 standard; Protein; 99 AA
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Hoogwerf AJ, Ledbetter SR;
WPI; 95-082239/11.
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Best Local Similarity 100.0%;
                                                              29-AUG-1995 (first entry)
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29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
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29-NOV-1990; FR-014961.
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(SNFI ) SANOFI SA.
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1 EICADPTOKWVQ 12
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                                                                                                          Homo sapiens.
WO9504158-A.
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Disclosure: Page 5: 27pp; English.

Disclosure: Page 5: 27pp; English.

The analogue, MCP-1 (10-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the neterminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 blological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared
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07-NOV-1997 (first entry)
Monocyte chemoattractant protein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Monocyte chemoattractant protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor:
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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2-myristate-3-acetate (see Q25259). The mature protein is claimed. It can be N-terminally deleted such that the mature protein starts at Val 3 or at Lys 19. The leader sequence is active in animal cells. See Q25258-Q25262.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
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                                                                                                                                                                                  Score 95; DB 2; Length 109;
Pred. No. 1.76e-02;
                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W13598 standard; peptide; 66 AA.
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W13599 standard; peptide; 67 AA.
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Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                  Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWIX) LEWIS I.
GONG J, LEWIS I;
WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                        1 EICADPTQKWVQ 12
                                                                                                                                                                                                                                                                                                                    83 eicadptgkwvg 94
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19-JUN-1995; 152141.
                                                                                                                             109 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     lung disease.
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1 EICADPTOKWVQ 12

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The present sequence represents an analogue, MCP-1 (9-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal annio acids 1-8 of MCP-1). The analogue is the protein activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as a nati-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding Chemical MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably with 75:1 for prior art mutant 7ND.

Sequence 68 AA;
                                                                                                                                                            The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases. MCP-1 has been implicated in allergic and chronic inflammatory diseases. G. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
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                                                                              N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
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Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 90; DB 24; Length 68;
Pred. No. 5.67e-02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 90; DB 24; Length 67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 5.67e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                     27pp; English.
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W13597 standard; peptide; 68 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  anti-inflammatory agent
Claim 7; Page 5; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 94.7%;
Best Local Similarity 91.7%;
Matches 11; Conservative
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19-JUN-1995; CA-152141.
                                                                                                                                  anti-inflammatory agent
Disclosure; Page 5; 27pk
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 eicadpkgkwvg 52
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WPI; 97-165844/16.
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                                          Gong J, Lewis I;
WPI; 97-165844/16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (LEWI/) LEWIS I.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W13597;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractant protein analogue MCP-1 (8-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                note= "amino acids 2-8 of the native protein have
been deleted between these residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
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                                                                                        monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 90; Do ...
Pred. No. 5.67e-02;
...ma+rhes 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         undergoing coronary artery angioplasty.
Sequence 69 AA:
                                                                                                                                                                                                                                                                                                                                                                                                                       (DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T
W13596 standard; peptide; 69 AA.
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Claim 5; Page 5; 27pp; English.
  R87678 standard; protein; 69 AA.
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Best Local Similarity 91.78;
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                                              21-FEB-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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12-NOV-1993; US-152301.
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5..45
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zhang YJ;
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WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rollins B, Zhang
WPI; 95-215051/28
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                                                                                                                                                                                                                                                                          disulfide_bond
disulfide_bond
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                                                                         des(2-8) MCP-1
                                                                                                                                                                                                   modified_site
                                                                                                                                                                                                                                                                                                                           WO9513295-A1.
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                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                              18-MAY-1995
                                                                                                                          angioplasty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W13596;
                               R87678;
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Gaps

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chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1 acts as an antagonist of MCP-1 receptor. Biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung MCP-1 receptors than prior att mutant versions of MCP-1 e.g. preferably with MCP-1 for binding providing 50% inhibition of binding at a 25:1 ratio or less, compared Sequence 69 AA;
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28-Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of anino derivative based on the parent protein disclosed in Rollins, Molecular The peptides can be used to prevent restenosis, e.g. in patients
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "Asp in the native sequence is replaced by Ala"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 6; Page 11; 22pp; English.
                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                      Score 90; DB 24; Length 69;
Pred. No. 5.67e-02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 90; DB 14; Length 76;
Pred. No. 5.67e-02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             undergoing coronary artery angioplasty. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                           л 9
R87677 standard; protein; 76 AA.
                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 91.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                           R87677;
21-FEB-1996 (first entry)
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Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                           11; Conservative
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WPI; 95-215051/28.
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Matches 11: Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disulfide_bond
WO9513295-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (3-Ala) MCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     angioplasty.
Homo sapiens.
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R87680 standard; protein; 76 AA. R87680;

RESULT

1 EICADPTQKWVQ 12

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05-MAR-1996 (first entry)

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Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) -
useful for therapy or diagnosis of restenosis, etc.
Disclosure, Column 13-14; 16pp; English.

This is the amino acid sequence of the human monocyte chemoattractant
protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent
strimulator of monocyte chemotaxis and is produced by injured vascular
smooth cells thus attracting monocytes and macrophages which infiltrate
the injured area and release growth factor. This causes proliferation of
the vascular smooth cells resulting in restenosis. The gene sequence can
be used to generate antisense sequences e.g. T48093-7, which can be used
to inhibit in vitro MCP-1 produ. by monounclear cells e.g. lymphocytes or
macrophages, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                      therapeutic effect on skin wounds and ulcers.

Disclosure, Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MOAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.
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                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Monocyte chemotactic activating factor for use as wound remedy. monocyte chemotactic activating factor; MCAF; wound remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monocyte chemotactic protein 1. Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell; vascular restenosis.
                                                                                                                                                                      Wound treatment using monocyte chemotactic factor - has potent
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                                                                                                                                                                                                                                                                                                                                                  Score 90; DB 14; Length 76; Pred. No. 5.67e-02; 0; Mismatches 1; Indels
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Pred. No. 5.67e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'note= "encoded by codon CAG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "encoded by codon CAC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "encoded by codon AUG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-NOV-1996.
22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-MAY-1994; US-250958.
(UNMI ) UNIV MICHIGAN.
KUNKEL SL, LYJE LR, Strieter RM;
WPI; 96-505405/50.
N-PSDB; 148092.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09374 standard; Protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                  94.78;
91.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 94.7%;
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                         Naruto M;
                                                                                   13-SEP-1994; J01512.
13-SEP-1993; JP-227385.
                                                                                                                         (TORA ) TORAY IND INC.
                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EICADPTOKWVQ 12
                                                                                                                                    Matsushima K, Na
WPI; 95-131181/17
                                                                                                                                                                                                                                                                                                                                                                                                               50 eicadpkqkwvq
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                                      sapiens.
                                                      WO9507710-A1.
23-MAR-1995.
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Mammalian.
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Radio.labelling neutrophil-activating peptide(s) - for imaging targetted delivery of radioactive agent with a represents mature human monocyte chemoattractant protein-1 with a main and a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal can detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either iodine-123 or iodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with the method can be used for imaging a site of infection, inflammation, and a patheromatous lesion or restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Macrophage chemoattractant peptide designated GDCF-2.
Monocyte chemoattractant peptide; MCP: MCP-1; treatment; neoplasm; infection; human; monocyte receptor; chemotactic response; inflammation; monocyte infiltration.
                                                                                                                                                                                  Mature human monocyte chemoattractant protein-1 (MCP-1).
Mature human monocyte chemoattractant protein-1; cytokine; interleukin-8;
MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;
IL-8; neutrophil activating peptide; labelling; imaging; targeting;
radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
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Pred. No. 5.67e-02;
0; Mismatches 1; Indels
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30-MAR-1989; US-330446.
31-JAN-1989; US-304234.
(USSH ) US DEPT HEALTH & HUMAN SERVICES.
Appella E, Leonard EJ, Robinson EA, Yoshimura T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                              /note= "X= any amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lyle LR, Strieter RM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-OCT-1992; US-956863.
05-OCT-1992; US-956862.
29-APR-1994; US-235659.
(MLCW ) MALLINCKRODT MEDICAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W40175 standard; Protein; 76 AA.
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Wll131 standard; protein; 76 AA.
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Local Similarity 91.7%;
les 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UNIV MICHIGAN.
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                                             1 EICADPTOKWVO 12
    50 eicadpkqkwvg 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-OCT-1992; 956862.
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                                                                                                                                                                                                                                                                                                          restenosis
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Disclosure; page 3; 46pp; English. Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from leukocytes and has mol. wt. 8400. Used to treat infections and neoplasms.
                                                                                 Claim 1; Column 27; 21pp; English.

The present sequence represents a monocyte chemoattractant peptide (MCP) designated ODCF-2. MCPS can be isolated from human glioma cell line 0-105MG (e.g. present sequence) and peripheral blood mononuclear leukocytes. MCPs are used for the treatment of neoplasms and infections in humans. Short peptides derived from MCPs can be screened to identify those that can bind to the monocyte receptor without stimulating a chemotactic response. These are potentially useful for treating inflammation associated with monocyte infiltration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New peptide with specific chemotactic activity for monocytes - isolated from glioma or leucocyte cells, useful for treating infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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Peptide with chemotactic activity for monocytes - from human monocytes or glioma cells, useful for treating infections and
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Pred. No. 5.67e-02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                          Length 76;
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Similarity 91.7%; Pred. No. 5.67e-02;
11; Conservative 0; Mismatches 1;
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Yoshimura T; Robinson E; Appella E; Leonard E.
WPI; 89-263501/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell line U-105MG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= OTHER
/note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JAN-1990 (first entry)
Peptide from human glioma cell line U-10:
Glioma; leucocyte; chemotaxis; neoplasms.
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P90292 standard; peptide; 76 AA.
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ilarity 91.7%;
Conservative
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20-OCT-1993; U10074.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50 elcadpkqkwvq 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EICADPTQKWVQ 12
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31-JAN-1989; 030423.
31-JAN-1989; US-3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
hes 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
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PI Lyle LR:

WRI: 94-151314/18.

WRI: 94-151314/18.

Thatt-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and that.sense monocyte chemotactic protein-1 oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of vascular restenosis or potential restenosis.

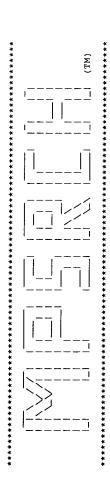
Pisclosure: Page 5: 42pp: English.

The sequences given in R53389 99 respecant sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These cliponucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis.

Radiolabelled antisense MCP-1 compounds may be constructed using high energy alpha or beta emitting isocopes rather than the gamma of mitters cutomarily used for diagnostic purposes. Antisense MCP-1 compounds are not attracted to inhibit production of MCP-1 so that compounds are not attracted to the area of vascular injury and sequence 76 AA; sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 90; DB 10; Length 76;
Pred. No. 5.67e-02;
0; Mismatches 1; Indels
22-OCT-1992; US-965678.
(MLCW ) MALLINCKRODT MEDICAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50 eicadpkqkwvq 61
|||||| |||||
| EICADPTQKWVQ 12
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Search completed: Fri Feb 4 17:44:18 2000 Job time : 17 secs.

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 17:57:06 2000; MasPar time 2.53 Seconds 133.995 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-68 (1-12) from US09150813.pep 97 1 DICADPKKKWVQ 12

Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

swiss-prot37 1:swissprot Database:

Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 25.627; Variance 32.369; scale 0.792

SUMMARIES

NO.	.72e-10	75e-10	.75e-10	28e-08	10e-08	10e-08	31e-08	.31e-08	.31e-08	2.31e-07	.31e-07	.20e-07	.20e-07	2.22e-06	22e-06	89e-06	89e-06	80e-06	80e-06	80e-06	18e-05	18e-05	18e-05
Pred.	3.72	6.75	6.75	1.28	4.10	4.10	7.31	7.31	7.31	2.31	2.31	7.20	7.20	2.22	2.22	3.89	3.89	6.80	6.80	6.80	1.18	1.18	1.18
Description	EOTAXIN PRECURSOR (EOS	EOTAXIN PRECURSOR (EOS		EOTAXIN PRECURSOR (EOS	Έ	υ	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MACROPHAGE INFLAMMATOR	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P			MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	MONOCYTE CHEMOTACTIC P	INTERLEUKIN-8 PRECURSO	MONOCYTE CHEMOTACTIC P	T-CELL SPECIFIC RANTES	T-CELL SPECIFIC RANTES	INTERLEUKIN-8 PRECURSO
QI QI	EOTA_HUMAN	EOTA_MOUSE	EOTA_RAT	EOTA_CAVPO	MCP1_HUMAN	MCP1_CANFA	MCP4_HUMAN	MCP1_PIG	MCP2_BOVIN	MIP4_HUMAN	MCP1_MOUSE	MCPA_BOVIN	MCP1_RABIT	MCP3_HUMAN	MCP1_RAT	MCPB_BOVIN	MCP5_MOUSE	MCP2_PIG	IL8_CAVPO	MCP1_CAVPO	SISD_MOUSE	SISD_RAT	IL8_CANFA
DB	Н	~1	щ	Н	Н		Н	Н	1	Н	Н	Н	Н	Н	Н	Н	—	-	Н	1	1	Н	Н
Length	97	97	97	96	66	101	98	66	66	8	148	66	125	66	148	74	104	<u>გ</u>	101	120	91	92	101
% Query Match	100.0	99.0	99.0	93.8	91.8	91.8	90.7	90.7	90.7	88.7	88.7	86.6	9.98	84.5	84.5	83.5	83.5	82.5	82.5	82.5	81.4	81.4	81.4
Score	46	96	96									84	84	82	82	81	81	80	80	80	79	79	79
Result No.	٦	7	Э	4	5	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23

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INTERLEUKIN-8 PRECURSO MACROPHAGE INFLAMMATOR MONOCYTE CHEMOTACTIC P INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES STROMAL CELL-DERIVED F GRECORR STROMAL CELL-DERIVED F GRECORR GRECORR MACROPHAGE INFLAMMATOR CHEMOKINE CC-1 PRECURS MONOCYTE CHEMORACTIC P	MACROPHAGE INFLAMMATOR TONSILLAR LYMPHOCYTE L LYMPHOTACTIN PRECURSOR
ILB_SHEEP ILB_PIG MIJA_RAT MIJA_RAT MIS_BOVIN SISD_CANPO SISD_HUMAN SDFI_MOUSE SDFI_MOUSE MIJB_CHICK CCC1_HUMAN MITA_MOUSE MITA_MOUSE CCC3_HUMAN MITA_MOUSE MITA_MOUSE CCC3_HUMAN MITA_MOUSE CCC3_HUMAN MITA_MOUSE MITA_MOUSE	MIIB_HUMAN MII0_HUMAN LTN_MOUSE
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ALIGNMENTS

SUL	HOMO SAPIENS (HUMAN). EUKARYOTA: METAZOA, CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES; CATARRHINI; HOMINIDAE; HOMO. [1] SEQUENCE FROM N.A. MEDLINE; 96181758. GARCIA-ZEPEDA E.A., ROTHENBERG M.E., OWNBEY T.R., LEDER P.,	T "Human eotaxin is a specific chemoattractant for eosinophil cells and provides a new mechanism to explain tissue eosinophilia."; NAT. MED. 2:449-456(1996). SEQUENCE FOR N.A. MEDLINE; 96.189937. MEDLINE; 96.189937. PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., KASSAM N., A SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.C.,			OHZHO: 0
A POTE DE DE COME	C O O C R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	RAC RAC RAC RAT RAT

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CRUMP M.P., RAJARATHNAM K., KIM K.S., CLARK-LEWIS I., SYKES B.D.;
"Solution structure of eotaxin, a chemokine that selectively recruits
eosinophils in allergic inflammation.";
BIOCHEMISTRY 37:11670-11678-11989.
-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN
DIRECTLY PROMOTES THE ACCUMULATION OF BOSINOPHILS, A PROMINENT
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -:- SUBCELLULAR LOCATION: EXTRACELLULAR.
-:- PTM: O-GLYCOSYLATED (PROBABLE).
-:- INDUCTION: BY THE ALPHA, IL-1-ALPHA AND INTERFERON GAMMA.
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.) (CHEMOKINE CC).
                                                                                                                                                                                                             "Genomic organization, complete sequence, and chromosomal location of the gene for human ectaxin (SCYA11), an eosinophil-specific {\tt CC}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genomic organization, sequence, and transcriptional regulation of
                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 97445071.
HEIN H., SCHLUETER C., KULKE R., CHRISTOPHERS E., SCHROEDER J.M.,
                                                                                                                                                 GARCIA-ZEPEDA E.A., ROTHENBERG M.E., WEREMOWICZ S., SARAFI M.N., MORTON C.C., LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 97; DB 1; Length 97; Pred. No. 3.72e-10; 0; Mismatches 0; Indels
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EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               L -> P (IN CLONE 34).
A -> T (IN CLONE 53).
R -> S (IN CLONE 34).
K -> R (IN CLONE 34).
6COF3D98 CRC32;
BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POLYMORPHISM; 3D-STRUCTURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the human ectaxin gene."; BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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nes 12; Conservative
                                                                                                                                                                                                                                                                                                      GENOMICS 41:471-476(1997).
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EMBL; Z92709; E329504; -
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                                                                                           TISSUE=PLACENTA;
MEDLINE; 97312708.
                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRUCTURE BY NMR. MEDLINE; 98380469.
                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BARTELS J.;
                                                                                                                                                                                                                                                                         chemokine.
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                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=CS7BL/61; TISSUE=LUNG;
MEDLINE; 96158146.
GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J.,
JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., KOPF M.,
GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEATURE OF ALLERGENS, THIS PROFEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEATURE OF ALLERGIC INTELAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.

-! SUBCELLULAR LOCATION: EXTRACELLULAR.
-: TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.

EXPRESSION INDUCTIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHELIAL CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
-! PIMOCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-! PIMI. O-GLYCOSYLATED (PROBABLE).
-! SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IMMUNITY 4:1-14(1996).
-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROPERING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                          ROTHENBERG M.E., LUSTER A.D., LEDER P.;
"Murine eotaxin: an eosinophil chemocatractant inducible in endothelial cells and in interleukin 4-induced tumor suppression.";
PROC. NATL. ACAD. SCI. US.A. 92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Mouse ectaxin expression parallels eosinophil accumulation during
lung allergic inflammation but it is not restricted to a Th2-type
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0
                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 97;
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                                                    01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 96; DB 1; Louis Pred. No. 6.75e-10;
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BY SIMILARITY.
F85A96BC CRC32;
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1; Mismatches
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larity 91.7%;
Conservative
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EMBL; U40672; G1113937; -.
MGD; MGI:103576; SCYA11.
PROSITE; PS00472; SMALL_CYI
                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
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Best Local Similarity
Matches 11; Conserv
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MEDLINE; 96004658.
LT 2
EOTA_MOUSE
P48298;
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Gaps

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Matches

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CAVIA PORCELLUS (GUINEA PIG).
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DISULFID
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CARBOHYD
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                                                                                                                                                                                                                                                                                                 -i- PTM: O-GLYCOSYLATED (PROBABLE).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                               SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
--- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT FEATURE OF ALLERGIC INPLAMMATORY REACTIONS (BY SIMILARITY).
--- SUBCELLULAR LOCATION: EXTRACELLULAR.
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                                                                                                                                 EUKARYOTA; METAZOA; CHÓRDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ROBENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
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                                                                                                                                                                         WILLIAMS C.M., NEWTON D.J., WILSON S.A., COLEMAN J.C., FLANAGAN B.F.;
                                                                                                                                                                                            SUBMITTED (DEC-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                               107A.RAT STANDARD; PRT; 97 AA. P97545; 008780; 15-JUL-1998 (REL. 36, CREATED) 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE) EOTAXIN PRECURSOR (EDSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-1994 (REL. 29, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -> S (IN REF. 2).
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Pred. No. 6.75e-10;
1; Mismatches 0
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BY SIMILARITY.
BY SIMILARITY.
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EMBL; U96637; G2098785; -
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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                                                                                                                                                                                                                                                                                                                       C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PFAM; PF00048; il8; 1.
HSSP; P80098; 1NCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFLAMMATORY RESPONSE
71 EICADPKKKWVQ 82
           1 DICADPKKKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           71 EICADPKKKWVQ 82
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                                                                                                                                                              SEQUENCE FROM N.A.
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32
33
94
                                                                                                                                                                                                                              TISSUE-LUNG;
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DISULFID
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CARBOHYD
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-!- PTM: O-GIXCOSYLATED (PROBABLE).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
-(-) CONTROL CC).
                                                                                                                                                                                                                                                                        MEDLINE; 95091818.
JOSE P.J., ADCOCK I.M., GRIFFITHS-JOHNSON D.A., BERKMAN N.,
WELLS T.C., WILLIAMS T.J., POWER C.A.,
"Ectaxin: cloning of an eosinophil chemoattractant cytokine and
increased mRNA expression in allergen-challenged guinea-Pig lungs.";
BIOCHEM. BIOPHYS. RES. COMMUN. 205:788-794(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 24-96.
STRAIN-HARTLEY; TISSUE=LUNG;
MEDLINE; 94157409.
JOSE P.J., GRIFFITHS-JOHNSON D.A., COLLINS P.D., WALSH D.T.,
MOQBEL R., TOTIX N.F., TRUONG O., HSUAN J.J., WILLIAMS T.J.;
Ectaxin: a potent ecsinophil chemoattractent cytokine detected in a
                                                                                                                                                    ROTHENBERG M.E., LUSTER A.D., LILLY C.M., DRAZEN J.M., LEDER P.; "Constitutive and allergen-induced expression of eotaxin mRNA in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     guinea pig model of allergic airways inflammation.";
J. EXP. MED. 179:881-887(1994).
-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
-!- SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
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D -> G (IN REF. 2).
DD28C7E5 CRC32;
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BY SIMILARITY.
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EMBL: X77603; G602552; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
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MCP1_HUMAN STANDARD; E
P13500;
O1-JAN-1990 (REL. 13, CREATED)
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96
56
72
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10753 MW;
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Best Local Similarity 100.0%;
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HSSP; P13500; 1MCA.
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                                                                            SEQUENCE FROM N.A.
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31
32
93
88
96 AA;
                                                                                                                                                                                                         guinea pig lung.
                                                                                                       LISSUE=LUNG
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EMBL; M31626; G386961; -
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN I PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC
AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA S., GRIFFIN P.R., SHABANOWITZ J., HUNT D.F., APPELLA E.;
"Complete amino acid sequence of a human monocyte chemoattractant, a putative mediator of cellular immune reactions.";
PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                       "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS LETT. 244:487-493(1989).
                                                                                                                                            MEDLINE; 89165862.
FURUTANI Y., NOMURA H., NOTAKE M., OYAMADA Y., FUKUI T., YAWADA M.,
                                                                                                                                                                 LARSEN C.G., OPPENHEIM J.J., MATSUSHIMA K.; Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).", BIOCHEM. BIOPHYS. RES. COMMUN. 159:249-255(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo."; MOL. CELL. BIOCHEM. 126:61-68(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHANG H.C., HSU F., FREEMAN G.J., GRIFFIN J.D., REINHERZ E.L.; "Cloning and expression of a gamma-interferon-inducible gene in monocytes: a new member of a cytokine gene family.";
                                                                                                                                                                                                                                                     ROLLINS B.J., STIER P., ERNST T., WONG G.G.; "The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 90290466.
SHYY Y.J., LI Y.S., KOLATTUKUDY P.E.;
"Structure of human monocyte chemotactic protein gene and its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SHYY Y.J., WRIGHT J.G., VALENTE A.J., CORNHILL J.F.,
                                                                                           EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                     COSHIMURA T., YUHKI N., MOORE S.K., APPELLA E., LERMAN M.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VOSHIMURA T., LEONARD E.J.; "Human monocyte chemoattractant protein-1 (MCP-1)."; ADV. EXP. MED. BIOL. 305:47-56(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    regulation by TPA.";
BIOCHEM. BIOPHYS. RES. COMMUN. 169:346-351(1990)
 01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                        MOL. CELL. BIOL. 9:4687-4695(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       monocytes: a new member of a INT. IMMUNOL. 1:388-399(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [9]
SEQUENCE OF 29-53 AND 82-92.
                                                                                  HOMO SAPIENS (HUMAN).
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                                                                       SCYA2 OR MCP1.
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KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;

"Structural characterization of a monomeric chemokine: monocyte
chemoattractant protein-3."

FEBS LETT. 395:277-282(1996).

-! FUNCTION: CHEMOROTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
ARTHRATIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT
OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
-!- PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDION CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE: 96195223.
WEBER M., UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.;
"Deletion of the NH2-terminal residue converts monocyte chemotactic
protein 1 from an activator of basophil mediator release to an
eosinophil chemoattractant.";
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ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
"Structure/activity analysis of human monocyte chemoattractant
protein-1 (MCP-1) by mutagenesis. Identification of a mutated protein
that inhibits MCP-1-mediated monocyte chemotaxis.";
J. BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LUBKOWSKI J., BUJACZ G., DOMAILLE P.J., HANDEL T.M., WLODAWER A.; "The structure of MCP-1 in two crystal forms provides a rare example of variable quaternary interactions.";
NAT. STRUCT. BIOL. 4:64-69(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HANDEL T.M., DOMAILLE P.J.;
"Heteronuclear (1H, 13C, 15N) NMR assignments and solution structure of the monocyte chemoaltractant protein-1 (MCP-1) dimer.";
BIOCHEMISTRY 33:6569-6584(1996).
DECOCK B., CONINGS R., LENAERTS J.-P., BILIAU A., VAN DAMME J.; "Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally
                                                                                                                                                                                                                                                                                                                                                    GROWENES T. CLORE G.M.;
GROWENES THE CHARGE G.M.;
"Modeling the three-dimensional structure of the monocyte chemo-
attractant and activating protein MCAF/MCP-1 on the basis of the
ROUTION Structure of interleukin-8.";
PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                              BIOCHEM. BIOPHYS. RES. COMMUN. 167:904-909(1990).
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                                                                                                                                                                                                                                                                                 3D-STRUCTURE MODELLING.
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MISSING: LOSS OF ACTIVITY.
MISSING: 90% REDUCTION IN ACTIVITY.
MISSING: 83% REDUCTION IN ACTIVITY.
D->A: 90% REDUCTION IN ACTIVITY.
N->A: 50% REDUCTION IN ACTIVITY.
R->F: 95% REDUCTION IN ACTIVITY.
S->O: 40% REDUCTION IN ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y->D: LOSS OF ACTIVITY.
R->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
53558695 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                 MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-077-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MISSING: LOSS OF ACTIVITY. MISSING: LOSS OF ACTIVITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101 AA.
                                                                                                                                                                                                                                                                                                            PROSITE; PS00472; SMALL_CYTOKINES_CC; 1. PFAM; PF00048; 118; 1. CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATO
                                                                                                                                                                                                                                                                                                                                                                                                                                              POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CARNIVORA; FISSIPEDIA; CANIDAE; CANIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
TISSUE-JUGULAR VEIN ENDOTHELIAL;
MEDLINE; 97176620.
G386961; JOINED. G386961; JOINED.
                                                                                                         G338007; JOINED. G338007; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11025 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                h 91.8%;
Similarity 83.3%;
10; Conservative
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                                                                                                                                                       G240868; -. G641145; -.
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                               G307163;
G338009;
                                                                           G487124;
G338007;
                                                                                                                                         G545465;
G240868;
                                                                                                                                                                                                                                                                                                                                                                              1DOK; 12-MAR-97.
1DOL; 12-MAR-97.
1DOM; 14-0CT-96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CANIS FAMILIARIS (DOG)
                                                              G34514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; A35474; A35474.
PIR; S03339; S03339.
                                                                                                                                                                                                                                                                   PDB; 1DON; 14-OCT-96
PDB; 1MCA; 15-OCT-94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 EICADPKOKWVO 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99 AA;
                                                                                                                                                       S71513;
A17786;
                                            M28226;
X14768;
                                M24545;
                                                                                                          M28223;
                                                                                                                           M28224;
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                                                                                                                                                                                                                                                                                                  4IM; 158105;
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DISULFID
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                                            EMBL;
EMBL;
EMBL;
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                                                                                                                       EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                        -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- INDUCTION: BY TNF-ALPHA.
-!- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 96235049.
UGUCCIONI M., LOETSCHER P., FORSSMANN U., DEWALD B., LI H., LIMA S.H.,
LI Y., KREIDER B., GAROTTA G., THELEN M., BAGGIOLINI M.;
"Monocyte chemotactic protein 4 (MCP-4), a novel structural and
                                                                                                                                                                                                                                                               VEINS, AND INFILTRATING LEUKOCYTES.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3."; J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                        -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE, 97113354.

GARCIA-ZEPEDA E.A., COMBADIERE C., ROTHENBERG M.E., SARAFI M.N.,
LAVIGNE F., HAMID Q., MURPHY P.M., LUSTER A.D.;

"Human monocyte chemoattractant protein (MCP)-4 is a novel CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE
CHEMOATTRACTANT PROTEIN 4) (CR-BETALO) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 89; DB 1; Length 101; Pred. No. 4.10e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A7075B14 CRC32;
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BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; 1DON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIMATES; CATARRHINI; HOMINIDAE; HOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11121 MW;
CIRCULATION 95:693-700(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          h 91.8%;
Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U29653; G1144186; -
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                                                                                                                                                                                                                                                                                                                                 C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59
75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101 AA;
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Matches 10; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MCP4_HUMAN
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DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-LUNG;
POWER C.A., METER A., RISON S.C.G., GUYE-COULIN F., WELLS T.N.C.;
SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!-FUNCTION: CHEWOTACTIC FACTOR THAT ATTRACTS MONOCYTES, IXMPHOCYTES,
BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCRSD AND CCRS RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -1- PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FNDQGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE. (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MASS SPECTROMETRY: MW-9314; MW_ERR=30; METHOD=MALDI; RANGE=17-98. MASS SPECTROMETRY: MW-8760; MW_ERR=30; METHOD=MALDI; RANGE=22-98. MASS SPECTROMETRY: MW-875; MW_ERR=30; METHOD=MALDI; RANGE=22-98. INDUCTION: BY INTERLEDES: MW_ERR=30; METHOD=MALDI; RANGE=24-98. INDUCTION: BY INTERLEDES: MW_ERR=30; METHOD=MALDI; RANGE=24-98. INSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE, THYMOS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS SEEN IN THE PULMONARX RATERY SMOOTH MUSCLE CELLS.
                                                                                                        MEDLINE; 97341179.

MEDLINE; 97341179.

MERRHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRANNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; Cloning, In vitro expression, and functional characterization of a novel human CC chemoKine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemoKine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS; SIGNAL; GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MONOCYTE CHEMOTACTIC PROTEIN 4. PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 7.31e-08;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 88; DB 1; Length 98;
                                                                                                                                                                                                                                                                                                                                                                            DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DF52F6EC CRC32;
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BY SIMILARITY.
functional analogue of MCP-3 and eotaxin.";
J. EXP. MED. 183:2379-2384(1996).
                                                                    SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL, U46767; G1732123; -.
BMBL; AC002482; G2340091; -.
EMBL; X98306; E248571; -.
MIM; 601391; -.
PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13500; 1D0L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL.
                                                                                                                                                                                                                                                                                                            J. BIOL. CHEM. 272:16404-16413(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90.78;
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les 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXOGENOUS PATHOGENS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                     receptor 2B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBUNIT: MONOMER OR HOMODIMER: IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE; 94183284.
HOSANG K., KNOKE I., KLAUDINY J., WEMPE F., WUTTKE W., SCHEIT K.H.;
"Porcine luteal cells express monocyte chemoattractant protein-1
(MCP-1): analysis by polymerase chain reaction and cDNA cloning.";
BIOCHEM. BIOPHYS. RES. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           ZACH O.R.F.; SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                    EUKARYOTA; METAŽOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           009141;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 88; DB 1; Length 99; Pred. No. 7.31e-08;
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                                                                                                                        01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN I PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
BY SIMILARITY.
ECC3AFB4 CRC32;
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                                                                                            99 AA
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EMBL; X79416; G872313; -.
EMBL; S7961472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; il8; 1.
HSSP; P13500; IDON.
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35 75 1
99 AA; 10976 MW;
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75.0%;
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                                                                                            STANDARD;
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1 DICADPKKWVQ 12
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72 EICADPKEKWVQ 83
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                         SUS SCROFA (PIG)
                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCP2_BOVIN
                                                                           LT 8
MCP1_PIG
P42831;
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its muse by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                           -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                          WEMPE F., HANES J., SCHEIT K.H.; "Cloning of the gene for bovine monocyte chemoattractant protein-2."; DNA CELL BIOL. 13:1-8(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE ACTIVATED MACROPHAGE ASSOCIATED CC CHEMOKINE 1) (AMAC-1)
                                                     BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOSINAE; BOS
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TISSUE-AORTA, AND LUNG;
MEDLINE: 97376836.
HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 2.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
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Pred. No. 7.31e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9BA2CD26 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AA.
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; S67956; G544997; -.
SYGSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P80098; 1NCV.
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CHEMOATTRACTANT PROTEIN 2).
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24
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75
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                                                                                                                                                                                                                                                                                                                                                              CAN BIND HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 DVCADPKQKWVQ 84
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                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 94114084.
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                                  SCYA8 OR MCP2
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P55774;
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                                                                                                                                                                                                                                                           MEDLINE; 97275308

WEDLINE; 97275308

WELLS T.N.C., PEITSCH M.C.;

"The chemokine information source: identification and characterization of novel chemokines using the WorldWideWeb and expressed sequence tag databases.",

"LEUKSC. BIOL. 61:545-550(1997).

"FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES. RO RARAUTOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES.

"TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THE LUNG. A LOWER LEVEL EXPRESSION." IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODES,
                                                                                                                    [3]
SEQUENCE FROM N.A.
KODELJA V., MUELLER C., POLITZ O., HAKIY N., ORFANOS C.E., GOERDT S.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
"A novel human CC chemokine PARC that is most homologous to macrophage-inflammatory protein-1 alpha/LD78 alpha and chemotactic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-UUL-1989 (REL. 36, LAST ANOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (PLATELET-DERIVED GROWTH FACTOR-INDUCIBLE PROTEIN JE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE; 89093129.
KAWAHARA R.S., DEUEL T.F.;
"Platelet-derived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet factor 4.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MACROPHAGE INFLAMMATORY PROTEIN 4.
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 86; DB 1; Length 89;
Pred. No. 2.31e-07;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            052AA3DC CRC32;
                                                              : T lymphocytes, but not for monocytes."; IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BY SIMILARITY
BY SIMILARITY
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; i18; 1.
HSSP; P13236; 1HUN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AB000221; D1022520; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9849 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THYMUS AND APPENDIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 QICADPNKKWVQ 79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCYA2 OR MCP1 OR JE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
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P10148;
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                                                                                                                                                                                                                    -:- SUBDITT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-:- INDUCTION: BY PLATELET-DERIVED GROWTH FACTOR.
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                              ROLLINS B.J., MORRISON E.D., STILES C.D.;
"Cloning and expression of JE, a gene inducible by platelet-derived
growth factor and whose product has cytckine-like properties.";
PROC. NATL. ACAD. SCI. U.S.A. 85:3738-3742(1988).
                                                                                                                         VAN DAMME J., DECOCK B., BERTINI R., CONINGS R., LENAERTS J.-P.,
PUT W., OPDENAKKER G., MANTOVANI A.;
Production and identification of natural monocyte chemotactic
protein from virally infected murine fibroblasts. Relationship with
the product of the mouse competence (JE) gene.";
EUR. J. BIOCHEM. 199:223-229(1991).
-:- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-1992 (REL. 24, CREATED)
1-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANDTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN IA PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 86; DB 1; Length 148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 2.31e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                              PIR; A30209; A30209.
PIR; A30861, A30861.
PIR; S16226; S16226.
MGD; MGI:98259; SCYA2.
MGD; MGI:98259; SCYA2.
PPRAF; PF00048; 118; 1.
HSSP; P13500; 1D0L.
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 J. BIOL. CHEM. 264:679-682(1989)
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75 BY
126 PC
16326 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88.7%;
75.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                         C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEMINAL FLUID PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             73 EVCADPKKEWVQ 84
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35
126
148 AA;
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SEQUENCE FROM N.A.
                                                                                                        SEQUENCE OF 26-42.
                        SEQUENCE FROM N.A. MEDLINE; 88234501.
                                                                                                                  91293127
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CARBOHYD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                              WEMPE F., EINSPANIER R., SCHEIT K.H.;
"Characterization by cDNA cloning of the mRNA of a new growth factor from bovine seminal plasma: acidic seminal fluid protein.";
BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                 MEDLINE; 92096117.
WEMPE F., HENSCHEN A., SCHEIT K.H.;
"Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).";
DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WREDLINE, $433803, 435003, CHELT R.H.;
"Characterization of the bovine monocyte chemoattractant protein-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MONOCYTE CHEMOTACTIC PROTEIN 1A. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994)
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01-DEC-1992 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 84; DB 1; L'
Pred. No. 7.20e-07;
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BY SIMILARITY.
C8F5821D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Mismatches
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EMBL, M84602, G163395; -.
PIR, 339296; A39296.
PIR, JC2336, JC2336.
PROSITE, PS00472; SMALL_CYTOKINES_CC; 1.
PFAM, PF00048; i18; 1.
HSSP, P13500; 1DON.
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35 75
99 AA; 11114 MW;
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75.08;
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                                                                                                                                                                                                                                          TISSUE=SEMINAL PLASMA;
MEDLINE; 92181448.
TISSUE-SEMINAL PLASMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 DICADPKKKWVQ 12
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Best Local Similarity
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P28292;
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SEQUENCE
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                                                                                                                                                                                                                                                      -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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"The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPDENAKKER G., FROYEN G., FITEN P., PROOST P., VAN DAMME J.; "Human monocyte chemotactic protein-3 (MCP-3): molecular cloning of the cDNA and comparison with other chemokines."; BIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
                                              YOSHIMURA T., YUHKI N.;
"Neutrophil attractant/activation protein-1 and monocyte
chemoattractant protein-1 in rabbit. cDNA cloning and their
expression in spleen cells ".
J. IMMUNOL. 146:3483-3488(1991).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE CHEMOATTRACTANT PROTEIN 3) (NC28).
SCYA7 OR MCP3.
HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 84; DB 1; Length 125;
Pred. No. 7.20e-07;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-99.
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FBAC9D27 CRC32;
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BY SIMILARITY.
POTENTIAL.
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STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13776 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 86.6%;
Local Similarity 90.9%;
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                                MEDLINE; 91225489.
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                                                                                                                                                                                                                              NEUTROPHILS
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P80098;
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SIGNAL
CHAIN
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                       occurrate and functional identification of two human, tumor-derived monocyte chemotactic proteins (MCP-2 and MCP-3) belonging to the chemokine family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -1- PTM: O-GLYCOSYLATED.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                      SEQUENCE FROM N.A.
MEDLINE; 93305913.
MINTY A., CHALON P.,
MAGAZIN M., MILOUX B., MINTY C., RAMOND P., VITA N., LUPKER J.,
SHIRE D., FERRARA P., CAPUT D.;
"Molecular cloning of the MCP-3 chemokine gene and regulation of its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         spectroscopy.";
BIOCHEMISTRY 36:4412-4422(1997).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97263733.
MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.; "Determination of the three-dimensional structure of CC chemokine monocyte chemoattractant protein 3 by 1H two-dimensional NNR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STUCTURE BY NMR, AND SUBUNIT.
MEDLINE; 97053697.
KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
"Structural characterization of a monomeric chemokine: monocyte chemoattractant protein-3.";
FEBS LETT. 395:277-282(1996).
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PFAM, PF00048; 118; 1.
CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MONOCYTE CHEMOTACTIC PROTEIN 3.
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                                                                                                                                                                                                                                                                                                                                                                                                             VAN DAMME J., PROOST P., LENAERTS J.-P., OPDENAKKER G.; "Structural and functional identification of two human,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T -> K (IN REF. 4).
MISSING (IN REF. 4).
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BY SIMILARITY.
POTENTIAL.
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EMBL; X72309; -; NOT_ANNOTATED_CDS.
EMBL; X71087; G288399; --
EMBL; X71087; G288399; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
PIR; S32222; S32222.
PIR; A54678; A54678.
                                                                                                                                                                                                                                                               EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EXP. MED. 176:59-65(1992).
   GENOMICS 21:403-408(1994).
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MIM; 158106; -.
                                                                                                                                                                                                                                                                                                                                                    TISSUE=OSTEOSARCOMA;
MEDLINE; 92308855.
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MEDLINE; 90174947.
TIMMERS H.T.H.M., PRONK G.J., BOS J.L., VAN DER EB A.J.;
Analysis of the rat JE gene promoter identifies an AP-1 binding site essential for basal expression but not for TPA induction.";
NUCLEIC ACIDS RES. 18:23-34(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NEUTROPHILS.
SUBDIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 91128376.

YOSHIMURA I., TAKEYA M., TAKAHASHI K.;
"Molecular cloning of rat monocyte chemoattractant protein-1 (MCP-1) and its expression in rat spleen cells and tumor cell lines.";
BIOCHEM. BIOPHYS. RES. COMMUN. 174:504-509(1991).
-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                     01-APR-1990 (REL. 14, CREATED)
1-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (IMMEDIATE-EARLY
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
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2; Mismatches 1; Indels
                              Score 82; DB 1; Length 99;
Pred. No. 2.22e-06;
1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
DB97F97C CRC32;
99 AA; 11200 MW; 7502E19C CRC32;
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BY SIMILARITY.
BY SIMILARITY.
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PIR; JN0128; JN0128.
PRSITE; S07723; S07723.
PROSITE; PSO0472; SMALL_CXTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
HSSP; P13500; 1DOL.
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Best Local Similarity 75.0%;
Matches 9; Conservative
                                Query Match 84.5%;
Best Local Similarity 75.0%;
                                                                9; Conservative
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                                                                                                                                    1 DICADPKKKWVQ 12
                                                                                                    73 EICADPTQKWVQ 84
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SEQUENCE FROM N.A.
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MCP1_RAT
P14844;
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SEQUENCE
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Search completed: Fri Feb 4 1/:5/:13 200 Job time : 7 secs.

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protein - protein database search, using Smith-Waterman algorithm MPsrch_pp

MasPar time 3.52 Seconds 72.505 Million cell updates/sec Fri Feb 4 17:55:46 2000; Run on:

not generated. Tabular output

>US-09-150-813-68

(1-12) from US09150813.pep 97 Title: Description: Perfect Score:

1 DICADPKKKWVQ 12 Scoring table: Sequence:

170751 seqs, 21266608 residues PAM 150 Gap 15 Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

Database:

lipart1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part11 18:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part30 31:part31 32:part32 33:part33 33:part33 33:part33 a-geneseq35

Variance 65.577; scale 0.283 Mean 18.545; Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

W13599		1000	
W13597 R87678 W13596 W40175 R87677 W09374 R87676	668 24 669 24 769 24 76 30 76 14 76 14 14	91.8 69 14 91.8 69 14 91.8 69 14 91.8 76 30 91.8 76 14 91.8 76 14 91.8 76 14 91.8 76 14 91.8 76 14	89 91.8 67 24 89 91.8 69 14 89 91.8 69 14 89 91.8 76 30 89 91.8 76 14 89 91.8 76 14 89 91.8 76 14 89 91.8 76 17

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(28-Asp) MCP-1.	MCF.	Sense MCP-1.	Monocyte chemotactic	Mature human monocyte		MCF.	Chemoattractant prote	yte	Macrophage chemoattra	Human monocyte chemo-	Drol3+ chemokine beta	Chemokine MCP-4 prote	ne	beta	Droll/2 chemokine bet			monocyte chemo	chemokine	chemokine beta	Monocyte chemotactic	$\overline{}$	Human dendritic cell	Macrophage inflammato	Human cytokine beta-1	Human MIP-4 protein.		Sequence of P6 precur		
R87675	R28660	R53398	R87680	W11131	R86859	R28663	R70800	R73914	W40174	P95387	W22675	W56690	W22673	W22672	W22674	W17665	W22671	W56087	W22670	R93087	W30191	W17662	W23643	R76127	W07204	W57698	R06398	R26581	AT.T.CNMENTS	OTHER DESIGNATION OF THE PERSON OF THE PERSO
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8	89	83	83	83	80	8	83	68	83	68	88	88	88	88	88	88	88	88	88	88	88	86	86	86	86	86	82	84		
17	18	19	20	21	22	23	24	25	26	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45		

Nucleic acids encoding secreted proteins from clones within ATCC 98076 - useful as immuno-modulators, anti-proliferative agents, 19076 - useful as immuno-modulators, anti-proliferative agents, requilators of cell differentiation and tissue growth, etc claim 26; Page 68; 99pp; English.

The present sequence represents the amino acid sequence of a secreted protein encoded by clone AM262_11. The clone was isolated from a human fetal kidney con alibrary using probe 705756. AM262_11 has some identity with the human ectaxin precursor gene and protein. As such, the AM262_11 protein may share some activity. The nucleic acid can be used for expression of recombinant proteins, as tissue, and sources of probes and primers. They can also be used to generate and sources of probes and primers. They can also be used to generate and sources of probes and primers. They can also be used to generate anti-protein or anti-bNA antibodies and as components of interaction trap assays etc. The protein is useful for raising antibodies, as immunoassay reagents and as nutritional supplements. The protein may possibly have any of a great variety of therapeutic activities. 05-JUN-1998 (first entry)
Amino acid sequence of the secreted protein encoded by clone AM262_11.
Secreted protein; antibody; immunoassay reagent;
nutritional supplement; therapeutic activity; eotaxin precursor. 11-DEC-1997.
06-JUN-1997; U08878.
06-JUN-1996, U6559224.
(GEMY) GENETICS INST INC.
Bowman M, Evans C, Jacobs K, Lavallie ER, McCly JM, WPI: 98-042191/04.
N-PSDB; V05729. _note= "not specified" ..., Location/Qualifiers Misc_difference 15 T W44721 standard; Protein; 82 AA. W09746683-A2. W44721; 05-JUN-1998 RESULT

Score 97; DB 29; Length 82; Pred. No. 8.92e-03; Query Match Best Local Similarity 100.0%;

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23-JUN-1995; US-494093.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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W Treatment; disease; inflammation; allergy, asthms; prevention;

W Treatment; disease; inflammation: allergy, asthms; rhinitis;

KW hypersensitivity; lung; pneumonia; Loeffler's; syndrome;

KW interstital; lib; diopathic pulmonary fibrosis;

W hermatoid arthritis; systemic; lupus erythematosus; SLE;

W M ermatoimostitis; bowel; anaphylaxis; dung; penicillin;

KW dermation; lisect sting; Crohn's; ulcerative colitis;

KW dermatisis; bowel; anaphylaxis; dermatosis;

KW dermatisis; fascitis; multiple sclerosis;

KW wasculitis; myositis; fascitis; multiple sclerosis;

KW wasculitis; myositis; fascitis; multiple sclerosis;

KW wasculitis; myositis; fascitis; multiple sclerosis;

W hamaplantation; allograft; graft versus host; cancer;

leukcoyte infiltration; reperfusion injury; atherosclerosis;

W hamaplantation; allograft; graft versus host; cancer;

N hamaplantation; allograft; graft versus host;

W hamaplantation allograft; spift; rejection;

W hamaplantation allograft; immunosuppression; immunodeficiency;

W hiffertion;

W hiffert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    useful in diagnosis and therapy of pancreatic diseases Claim 8; Page 28-29; English.
The sequences given in W00667-68 represent pancreas-derived chemokines, PANEC-1 and PANEC-2. These chemokines are highly expressed and specifically expressed in the pancreas and may therefore be used in diagnostic assays based on chemokine production in cases of inflammation or disease affecting the pancreas. These assays allow the early and accurate diagnosis of pancreatic disorders, and can differentiate between invasive diseases and genetic syndromes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleotide and protein sequences for human PANEC-1 and PANEC-2 -
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  Indels
                                                                                                                                                                                                                                                                                                  Pancreas expressed chemofine-1.
Pancreas-derived chemokine; PANEC-1; PANEC-2; diagnosis; inflammation; disease; cancer.
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Pred. No. 8.92e-03;
0; Mismatches 0;
0; Mismatches
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W00667 standard; Protein; 97 AA.
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Local Similarity 100.0%;
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  12; Conservative
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17-FEB-1995; US-390740.
(INCY-) INCYTE PHARM INC.
Bandman O, Coleman R, W
                                                       71 dicadpkkwvq 82
                                                                                                           1 DICADPKKKWVQ 12
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WO9700960-A1.
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                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
WO9625497-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                             22-AUG-1996.
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  Matches
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                                                                                                                                                                                                                                                                             NAME OF THE PART O
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therapy, chemotherapy, therapy for autoimmune disease or other drug therapy, such as corticosteroid therapy, which causes immunosuppression), immunosuppression due to (e.g. congenital) defliciency (e.g in eotaxin) or infectious diseases such as parasitic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eosinophilic lung tissue obtained from Balb/c mice sensitised to ovalbumin. The amplification product was used as a probe to screen a human genomic library in vector EMBL3 SP6/T7 to obtain the hE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Degenerate primers based on the guinea pig ectaxin amino acid sequence were used for the reverse transcriptase polymerase chain reaction (RT-PCR) amplification of RNA isolated from inflamed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                induced toxicity (e.g. septic or endotoxic shock), polymyositis, dermatomyositis, immunosuppression (e.g. in individuals with immunodeficiency syndromes such as AIDS, undergoing radiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W14990;
01-DEC-1997 (first entry)
Human eosinocyte (C type chemokine eotaxin, calcium; skin;
Human; eosinocyte; CC type; chemokine; eotaxin; calcium; skin;
small intestine; agonist; screening; antagonist; inflammation;
antibody; diagnosis; assay; disorder; asthma; allergy; atopic.
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                     Ringler DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 97; DB 23; I
Pred. No. 8.92e-03;
0; Mismatches 0;
                     Qin S,
(LEUK-) LEUKOSITE INC.
MacKay C, Newman W, Ponath PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W14990 standard; Protein; 97 AA.
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Local Similarity 100.0%;
nes 12; Conservative
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                                     97-087387/08.
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        treating asthma and other inflammatory diseases.
Claim 6; Page 31; 50pp; English.
Ebtaxin is useful for treatment of asthma or other diseases with an inflammatory component, especially accumulation of eosiniphils, e.g. rhinitis or eczema. Eotaxin is obtainable from bronchoalveolar lavage fluid of a subject after antigen challenge; from an inflammatory exudate fluid or from an in vitro culture of macrophages, lymphocytes, neutrophils, mast cells, airway cells, sequence 73 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                         Claim 2: Pages 27-28: 45pp; Japanese.

The present sequence is the human eosinocyte, CC type
Chemokine, eotaxin, which increases calcium flux in human
eosinocytes and is a human analogue of guinea pig eotaxin. The
eotaxin was derived from human small intestine, and is a specific
agonist for human CC type chemokine receptor 3. It may be used to
screen potential agonists and antegonists, which may be used to
anti-inflammatories. An anti-eotaxin antibody may be used in
diagnostic assays for eotaxin, which is implicated in inflammatory
discorders, e.g. asthma, other allergies and atopic skin
                                                                                                            Human CC chemokine (eotaxin) active on eosinocytes - useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated chemo:attractant protein, termed eotaxin - useful for treating asthma and other inflammatory diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ectaxin chemoattractant protein.
Botaxin, chemoattractant; inflammatory disease; inflammation; asthma: rhinitis; eczema; macrophage; lymphocyte; neutrophil; mast cell; connective tissue cell; vascular endothelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 73;
                                                                                                                                                                                                                                                                                                         Score 97; DB 24; Length 97;
Pred. No. 8.92e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 91; DB 13; Length 73;
Pred. No. 3.75e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (LUDW ) LUDWIG INST CANCER RES. (NAHE) NAT HEART & LUNG INST. Griffiths johnson DA, Hsuan JJ, Jose PJ, Williams TJ; WPI; 95-13135/17.
                                                                                                                          screening for eotaxin (ant)agonist(s), e.g. for treating
                                              05-OCT-1995; JP-259067.
(SHIO ) SHIONGI & CO LTD.
Harda S, Kittaura M, Nakajima T;
WPI; 97-226168/20.
N-PSDB; T62944.
                                                                                                                                                                                                                                                                                                                                                                                                                        r 5
R70252 standard; protein; 73 AA.
                                                                                                                                                                                                                                                                                                            Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
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Best Local Similarity 100.0%;
Matches 11; Conservative
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30-SEP-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-SEP-1994; G02006.
14-SEP-1993; GB-018984.
29-APR-1994; GB-008602.
                       01-OCT-1996; J02851.
28-FEB-1996; JP-041965.
                                                                                                                                                                                                                                                                                                                                                                           1 DICADPKKKWVQ 12
                                                                                                                                                                                                                                                                                                                                                             71 dicadpkkkwvg 82
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                                                                                                                                                                                                                                                                                   97 AA;
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WO9507985-A.
                                                                                                                                                                                                                                                                         inflammation.
                                                                                                                                       inflammation
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            0-APR-1997
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2 ICADPKKKWVO 12

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N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent.

Disclosure: Page 5: 27pp: English.

The present sequence represents an analogue, MCP-1 (10-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of WCP-1 which is an inflammatory madiator causing migration of the effects of WCP-1 which is an inflammatory madiator causing migration of the effects of WCP-1 which is an inflammatory madiator causing migration of the madiator madiator madiator causing migration of the madiator madiator causing migration of the madiator madiator
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                       Guinea pig eosinocyte CC type chemokine eotaxin. Guinea pig: eosinocyte; CC type; chemokine; eotaxin; calcium; skin; small intestine; agonist; screening; antagonist; inflammation; antibody; diagnosis; assay; disorder; asthma; allergy; atopic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Pages 30-31; 45pp; Japanese.

The present sequence is the guinea pig eosinocyte, CC type chemokine, eotaxin, which increases calcium flux in guinea pig agonists and antagonists, which may be used to screen potential agonists and antagonists, which may be useful as anti-inflammatorles. An anti-eotaxin antibody may be used in diagnostic assays for eotaxin, which is implicated in inflammatory disorders, e.g. asthma, other allergies and atopic skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human CC chemokine (eotaxin) active on eosinocytes - useful for screening for eotaxin (ant)agonist(s), e.g. for treating
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Pred. No. 3.75e-02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-AR-1996; J02851.
28-FEB-1996; JP-041965.
05-CCT-1995; JP-259067.
(SHTO ) SHIONGI & CO LTD.
Harada S, Kiteura M, Nakajima T;
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W13598;
T 6
W14991 standard; Protein; 96 AA.
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Best Local Similarity 100.0%;
Matches 11; Conservative
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                                                                                                                                              (first entry)
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19-JUN-1995; CA-152141.
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N-PSDB; T62945.
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WPI; 97-165844/16.
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CA2152141-A.
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                                                                                                                                                                                                                                                                                                                                                                                                    cobaya.
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                                                                                           W14991;
02-DEC-1997
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US-09-150-813-68.rag

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(LEWI/) LEWIS I.
Gong J, Lewis I;
WPI; 97-165844/16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          angioplasty
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                                                                                                                                                                                                                                                                                                                       Matches
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    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemotracturation protein-1 (MCP-1). The analogue, which lacks the chemotracturant protein-1 (MCP-1), acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases. Granthisis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably with 75:1 for prior art mutant 7ND.

Sequence 67 AA;
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MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND. Sequence 66 AA;
                                                                                            Gaps
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                                                                                                                                                                                                                                     Monocyte chemoattractant protein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Monocyte chemoattractant protein analogue MCP-1 (9-76). Truncated monocyte chemoattractant protein-1; inhibitor: receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                          N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
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Pred. No. 6.04e-02;
1; Mismatches 1; Indels
                                                                  Length 66;
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                                                                 Score 89; DB 24; Dred. No. 6.04e-02;
                                                                                           1; Mismatches
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W13599 standard; peptide; 67 AA.
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W13597 standard; peptide; 68 AA.
                                                                 91.8%;
83.3%;
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Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-NOV-1997 (first entry)
                                                                                                                                                                                                                        07-NOV-1997 (first entry)
                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                           19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                       anti-inflammatory agent
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19-JUN-1995; CA-152141.
                                                                                                                   40 eicadpkqkwvq 51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41 eicadpkgkwvg 52
                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                   Gong J, Lewis I;
WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                        Homo sapiens.
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                                                                                                                                                                                                                                                                                          lung disease.
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20-DEC-1996.
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                                                                  Query Match
                                                                                                                                                                                                              W13599;
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                                                                                Best Loc
Matches
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The man monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of reapable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenois.

The endogenous MCP-1 and can be used to treat restenois.

Solve the page 11, 22pp. English.

Wordyte chemoattractant protein-1 (WCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous.

WCP-1, provided that the derivative has not been modified by the that they inhibit the monocyte chemoattractant activity of endogenous.

WCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by aspartate: (2) substitution of 28 Tyr by aspartate: (2) substitution of 24 Arg by Phe: (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients squence 69 AA;
                                                                                                                                                                                                                                                                                                    receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared sequence 68 AA:
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N'terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent claim 7; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (9-76), of monocyte chemoattractant protein-1 (MCP-1). The manalogue, which lacks the N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 89; DB 24; Length 68; Pred. No. 6.04e-02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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R87678 standard; protein; 69 AA.
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Best Local Similarity 83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 91.8%;
Best Local Similarity 83.3%;
Matches 10; Conservative
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WPI; 95-215051/28.
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1 DICADPKKKWVQ 12
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Claim 1; Column 27; 21pp; English.
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Macrophage chemoattractant peptide designated GDCF-2.
Monocyte chemoattractant peptide; MCP; MCP-1; treatment; neoplasm; infection; human; monocyte receptor; chemotactic response; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                       07-NOV-1997 (first entry)
Monocyte chemoattractant protein analogue MCP-1 (8-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 24; Length 69; 6.04e-02;
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06-JUN-1995; 466280.
30-MAR-1989; US-330446.
31-JAN-1989; US-304234.
(USSH) US DEPT HEALTH & HUMAN SERVICES.
Appella E, Leonard EJ, Robinson EA, Yosh
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                                                                                                                               W13596 standard; peptide; 69 AA.
W13596;
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Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                Homo sapiens.
CA2152141-A.
20-DEC-1996.
19-UN-1995; 152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           anti-inflammatory agent
54
                         43 eicadpkgkwvg 54
43 eicadpkgkwvg
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lewis I;
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                                                                                                                                                                                                                                                                                         lung disease.
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셤
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Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis.

Stand 6. Page 11: 22pp; English.

Claim 6. Page 11: 22pp; English.

Monocyte chemoatractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoatractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations or re: (1) substitution of 28-Tyr by aspartate; (2) substitution of 24-Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 acids 2-8. The present sequence is a specifically claimed human MCP-1 and Cellular Biology, Vol. 9, No. 11, pp. 4687-4655, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
The present sequence refreshirs a monocyte chemoattractant peptide (MCP) designated GDCF-2. MCPs can be isolated from human glioma cell line U-105MG (e.g. present sequence) and peripheral blood mononuclear leukocytes. MCPs are used for the treatment of neoplasms and infections in humans. Short peptides derived from MCPs can be screened to identify those that can bind to the monocyte receptor without stimulating a chemotactic response. These are potentially useful for treating inflammation associated with monocyte infiltration.
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Monocyte chemotactic protein 1.
Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
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                                                                                                                                                                                                                                                                                                                                    Length 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 89; DB 14; Length 76;
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1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 6.04e-02;
1; Mismatches 1
                                                                                                                                                                                                                                                                                                                                        Score 89; DB 30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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W09374 standard; Protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R87677 standard; protein; 76 AA.
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Best Local Similarity 83.3%;
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WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DICADPKKKWVQ 12
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07-NOV-1994; U12874
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888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) -
useful for therapy or diagnosis of restenosis, etc.
Disclosure, column 13-14; 16pp; English.
This is the amino acid sequence of the human monocyte chemoattractant
protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent
stimulator of monocyte chemotaxis and is produced by injured vascular
smooth cells thus attracting monocytes and macrophages which infiltrate
the injured area and release growth factor. This causes proliferation of
the vascular smooth cells resulting in restenosis. The gene sequence can
be used to generate antisense sequences e.g. T48093-7, which can be used
to inhabit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or
macrophages, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis.

Claim 5; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations by Phe; (3) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 34-Asp by Ala; and/or (4) deletion of anino acids 2-8. The present sequence is a specifically claimed human MCP-1
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Pred. No. 6.04e-02;
1; Mismatches 1; Indels
                                                                                                                                                              /note= "encoded by codon AUG"
misc_difference 65
                                                                                                                           /note= "encoded by codon CAG"
                                                                                                                                                                                                                                                   /note= "encoded by codon CAC"
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07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
ROLLINS B, ZhANG XJ;
WPI; 95-215051/28.
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                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                 22-0CT-1992; US-965678.
27-MAY-1994; US-250958.
(UNI) UNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter RM;
WPI; 96-505405/50.
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R87676 standard; protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 91.8%;
Best Local Similarity 83.3%;
Matches 10; Conservative
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12..52
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1 DICADPKKKWVQ 12
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22-OCT-1992; 965678.
      vascular restenosis
                                                                                                                                                        misc_difference 51
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                                                                                             misc_difference
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WO9513295-A1.
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                             Homo sapiens.
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Cc derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

Cc The peptides can be used to prevent restenosis, e.g. in patients

Cc undergoing coronary artery angloplasty.

SQ Sequence 76 AA;

Query Match

Best Local Similarity 83.3%; Pred. No. 6.04e-02;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

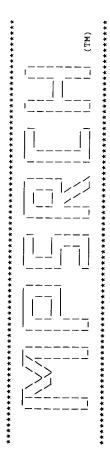
Db 50 elcadpkqkwvq 61

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Qy 1 DICADPKKWVQ 12

Search Completed: Fri Feb 4 17:56:04 2000

Job time : 18 secs.
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 18:03:08 2000; MasPar time 2.53 Seconds 134.084 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-72 (1-12) from US09150813.pep 82 1 KACLNPASPIVK 12 Title:

Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

Database:

swiss-prot37 1:swissprot

Mean 23.824; Variance 25.490; scale 0.935 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	Ω	Description	Pred. No.
-	82	100.0	107	: -	GRO HUMAN	GROWTH REGILATED PROTE	7.20-09
7	77	93.9	107	-	MI2A HUMAN	MACROPHAGE INFLAMMATOR	1 650-07
m	70	85.4	107	Н	MI2B_HUMAN		1.57e-05
7	65	79.3	104	-	GRO2 RABIT	GROWTH REGULATED PROTE	3.59e-04
Ŋ	64	78.0	86	Н	GROG BOVIN	REGULATED	6.630-04
9	62	75.6	104	Н	GROA_BOVIN	REGULATED	2.236-03
7	62	75.6	104	Н	GROB_BOVIN		2.23e-03
œ	59	72.0	132	-	LIX_MOUSE	CYTOKINE LIX PRECURSOR	1.32e-02
σ,	28	70.7	100	Н	MIP2_MOUSE	MACROPHAGE INFLAMMATOR	2.35e-02
10	57	69.5	101	Н	GRO_CRIGR	GROWTH REGULATED PROTE	4.18e-02
11	57	69.5	119	П	PF4L_PIG	PLATELET BASIC PROTEIN	4.18e-02
12	57	69.5		Н	PF4L_HUMAN	PLATELET BASIC PROTEIN	4.18e-02
13	26	68.3			GCP2_BOVIN	GRANULOCYTE CHEMOTACTI	7.39e-02
14	26	68.3		П	LIX_RAT	CYTOKINE LIX PRECURSOR	7.39e-02
12	26	68.3	543	~	CP1B_RAT	CYTOCHROME P450 1B1 (E	7.39e-02
16	52	67.1	71	Н	GRO1_RABIT	PERMEABILITY FACTOR 2	1.30e-01
17	52	67.1	96	Н	GRO_RAT	GROWTH REGULATED PROTE	1.30e-01
18	52	67.1		۲	GRO_MOUSE	GROWIH REGULATED PROTE	1.30e-01
13	52	67.1		П	GRO_CAVPO	GROWTH REGULATED PROTE	1.30e-01
20	53	64.6		Н	MIP2_RAT	MACROPHAGE INFLAMMATOR	3.92e-01
71	53	9. 49		_	AMC2_PIG	ALVEOLAR MACROPHAGE CH	3.92e-01
22	51	62.2	86	Н	INIG_RAT	MOB-1 PROTEIN PRECURSO	1.15e+00
23	21	62.2	114	П	EN78_HUMAN	NEUTROPHIL ACTIVATING	1.15e+00

1.15e+00	1.15e+00	1.15e+00	1.95e+00	1.95e+00	1.95e+00	1.95e+00	1.95e+00	1.95e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00	3.28e+00
GRANULOCYTE CHEMOTACTI	GAMMA INTERFERON INDUC	UDP-N-ACETYLMURAMATE	INTERFERON-GAMMA INDUC	GAMMA INTERFERON INDUC	VITAMIN D-BINDING PROT	1,4-ALPHA-GLUCAN BRANC	3-HYDROXY-3-METHYLGLUT	NEGATIVE REGULATOR OF	TUBULIN ALPHA CHAIN (F	TUBULIN ALPHA CHAIN.	TUBULIN ALPHA-2 CHAIN.	TUBULIN ALPHA-3 CHAIN.	TUBULIN ALPHA CHAIN, T	TUBULIN ALPHA-3 AND AL	TUBULIN ALPHA CHAIN.	TUBULIN ALPHA-2 CHAIN.	TUBULIN ALPHA CHAIN (A	TUBULIN ALPHA-2/ALPHA-	HYPOTHETICAL 52.9 KD P	GAG POLYPROTEIN [CONTA	
GCP2_HUMAN	MIG_HUMAN	MURC_BUCAP	INIG_HUMAN	MIG_MOUSE	VTDB_RABIT	GLGB_SOLTU	HMDH_SCHPO	BIME_EMENI	TBA_LYTPI	TBA_ONCKE	TBA2_DROME	TBA3_DROME	TBAT_ONCMY	TBA3_MOUSE	TBA_BOMMO	TBA2_MOUSE	TBA_TORMA	TBA2_PATVU	YUQP_CAEEL	GAG_MMTVC	GAG_MMTVB
П	Н		-	-	Н	Н	Н	Н	П	Н	Н	Н	Н	Н	Н	Н	-	Н	Н	Н	Н
114	125	483	86	126	476	861	1053	2073	161	444	449	450	450	450	450	451	451	452	453	591	591
62.2	62.2	62.2	61.0	61.0	61.0	61.0	61.0	61.0	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
51	51	51	20	20	20	20	20						4				49			49	
24	25	26	27	28	29	30	31	32	33	34	93	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

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1 KACLNPASPIVK 12

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"Solution structure of GRO/melanoma growth stimulatory activity
"Solution structure of GRO/melanoma growth stimulatory activity
determined by 1H NMR spectroscopy.";
J. BIOL. CHEM. 269:32909-32915(1994).
-!- FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS. MAY PLAY A
ROLE IN INTELAMMATION AND EXERTS ITS EFFECTS ON ENDOTHELIAL CELLS
IN AN AUTOCRINE FASHION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
MEDLINE; 89246368.
GOLDS E.E., MASON P., NYIRKOS P.;
Inflammatory cytokines induce synthesis and secretion of gro protein and a neutrophil chemotactic factor but not beta 2-microglobulin in human synovial cells and fibroblasts.";
                                                                                                                                                                                                                                                       MEDLINE; 89356650.
WEN D., ROWLAND A., DERYNCK R.;
"Expression and secretion of gro/MGSA by stimulated human endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PFAM; PF00048; i18; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "1H assignment and secondary structure determination of human melanoma growth stimulating activity (MGSA) by NMR spectroscopy."; FEBS LETT. 330:302-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 94376296.

FARRENGHER W.J., REILLY D., COLBY T., HESSELGESSER J., HORUK R.;
FIRE SOLUTION STRUCTURE Of melanoma growth stimulating activity.";
J. MOL. BIOL. 242:252-270(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 93387459.
FAIRBROTHER W.J., REILLY D., COLBY T., HORUK R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43 69
45 85
107 AA; 11301 MW; 4DEE921B CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GRO PROTEIN.
                                                                                                                                                             BIOCHEM. J. 259:585-588(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       EMBO J. 8:1761-1766(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; J03561; G306806; -.
EMBL; X12510; G34622; -.
EMBL; X54489; G34626; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        107
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PIR; S00983; S00983.
PIR; S03976; S03976.
PIR; S13669; S13669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PDB; 1MGS; 30-SEP-94.
PDB; 1MSG; 31-MAR-95.
PDB; 1MSH; 31-MAR-95.
                                                                                                                                                                                                                             POSSIBLE FUNCTION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 95105175.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRUCTURE BY NMR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                           01-FEB-1991 (REL. 17, LAST SEQUENCE UPDATE)
01-JUN-1994 (REL. 29, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN-2-ALPHA PRECURSOR (MIP2-ALPHA) (GROWTH REGULATED PROTEIN BETA) (GRO-BETA).
                                                                                                                                                                                                                                                                                                                                                                                                  "Cloning and sequencing of a new gro transcript from activated human monocytes: expression in leukocytes and wound tissue."; MOL. CELL. BIOL. 10:5596-5599(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDILINE; 91017578.
HASKILL S., PEACE A., MORRIS J., SPORN S.A., ANISOWICZ A., LEE S.W.,
SMITH T., MARTIN G., RALPH P., SAGER R.;
"Identification of three related human GRO genes encoding cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROC. NATL. ACAD. SCI. U.S.A. 87:7732-7736(1990).
-!- FUNCTION: PRODUCED BY ACTIVATED MONOCYTES AND NEUTROPHILS AND
EXPRESSED AT SITES OF INFLAMMATION.
                                                                                                                                                                                                                                               TEXAMP-OLSON P., GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B., TERBRE M., VAN DEVENTER S., CERAMI A.; "Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues."; J. EXP. MED. 172:911-919(1990).
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                                                                                                                                                 EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 77; DB 1; Length 107; Pred. No. 1.65e-07; 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2-ALPHA.
BY SIMILARITY.
BY SIMILARITY.
i, 6E431A15 CRC32;
 107 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                  01-FEB-1991 (REL. 17, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43 69 E
45 85 E
107 AA; 11389 MW;
                                                                                                                                                                                                                 TISSUE-HISTIOCYTIC LYMPHOMA; MEDLINE; 90354792.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 93.9%;
Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 90377259.
IIDA N., GROTENDORST G.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; X53799; G34659; -.
EMBL; M36820; G183629; -.
EMBL; M57731; G183627; -.
 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34
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HSSP; P09341; IMGS.
                                                                                                                   GRO2 OR GROB OR MIP2A.
HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; JH0281; JH0281.
MIM; 139110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          functions.";
MI2A_HUMAN
P19875;
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SEQUENCE
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83 KACLNPASPMVK 94

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83 KACLNPASPIVK 94

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Matches
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                                                                                                                                                                                                                                                                                                                                                                                           PROC. NATL. ACAD. SCI. U.S.A. 87:7732-7736(1990).
-!- FUNCTION: MAY PLAY A ROLE IN INFLAMMATION AND EXERT ITS EFFECTS
ON ENDOTHELIAL CELLS IN AN AUTOCRINE FASHION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
                                                      MIZB_HUMAN STANDARD; PRT; 107 AA.
P19876;
01-FEB-1991 (REL. 17, CREATED)
01-JUN-1994 (REL. 29, LAST SEQUENCE UPDATE)
01-JUN-1994 (REL. 29, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2-BETA PRECURSOR (MIP2-BETA) (GROWTH REGULATED PROTEIN GAMMA) (GRO-GAMMA).
                                                                                                                                                                                                                                                                                                                                MEDLINE; 91017578.
HASKILL S., PEACE A., MORRIS J., SPORN S.A., ANISOWICZ A., LEE S.W., SMITH T., MARTIN G., RALPH P., SAGER R.;
"Identification of three related human GRO genes encoding cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                      SEQUENCE FROM N.A.
TISSUE-HISTLOCYTIC LYMPHOMA;
MEDLINE; 90354792.
TEKAMP-OLSON P., GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B.,
FABRE M., VAN DEVENTER S., CERAMI A.;
Gloning and characterization of cDNAs for murine macrophage
inflammatory protein 2 and its human homologues.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 70; DB 1; Length 107;
Pred. No. 1.57e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2-BETA.

BY SIMILARITY.

BY SIMILARITY.

AA -> G (IN REF. 2).

4; 6F2A63D2 CRC32;
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PFAM; PF00048; i18; 1.
HSSP; P09341; 1MGS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11342 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 90.9%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X53800; G34663; -.
EMBL; M36821; G183633; -.
PIR; B38290; B38290.
PIR; JH0282; JH0282.
MIM; 139111;
                                                                                                                                                           (HUMAN)
43
45
27
107 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 KACLNPASPIV 11
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                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                          HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                 functions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE;
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                                                                                                                                                                                                                                                                                                                                          SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: PLAKS A ROLE IN MONOCYTE ADHESION TO THE ENDOTHELLUM.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C.Y.-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOSINAE; BOS.
                                                                                                                                                                                                                                                             SCHWARTZ D., CHAVERRI-ALAMADA L., BERLINER J., KIRCHGESSNER T., QUISOMORO D., FANG J., TEKAMP-OLSON P., LUSIS J., FOGELMAN A., TERRITO M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GROWTH REGULATED PROTEIN HOMOLOG.
BY SIMILARITY.
BY SIMILARITY.
C75ABF07 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                           ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG GAMMA PRECURSOR (GRO-GAMMA).
                                         01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
01-FEB-1996 (REL. 33, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG PRECURSOR (GRO HOMOLOG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 65; DB 1; Length 104;
Pred. No. 3.59e-04;
3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1. 
PFAM; PF00048; i18; 1. 
HSSP; P09341; 1MGS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROBABLE
  PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
10900 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79.3%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U95811; G2735493; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U12310; G520743;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BOS TAURUS (BOVINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104 AA;
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Best Local Similarity
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                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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046675;
GRO2_RABIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
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                       P47854
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Sat Feb

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                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELOMGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C.Y.-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GROWTH REGULATED PROTEIN HOMOLOG ALPHA.
BY SIMILARITY.
SIMILARITY.
CCFD567E CRC32;
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                                                     GROWTH REGULATED PROTEIN HOMOLOG GAMMA.
                                                                                                                                                        Gaps
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE; BOS.
                                                                                                                                                                                                                                                                                                                                                                                 ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS
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0
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0
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                          15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG ALPHA PRECURSOR (GRO-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG BETA PRECURSOR (GRO-BETA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 104;
                                                                                                                                                     0; Indels
                                                                                                                          Length 98;
PROSITE; PSO0471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 62; DB 1; L/
Pred. No. 2.23e-03;
                                                                                                                          Score 64; DB 1; L. Pred. No. 6.63e-04;
                                                                   BY SIMILARITY.
BY SIMILARITY.
ECCC2B4C CRC32;
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15-DEC-1998 (REL. 37, LAST SEQI
15-DEC-1998 (REL. 37, LAST ANNO
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                                                                                               10393 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75.6%;
70.0%;
                                                                                                                          78.0%;
80.0%;
                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                     STANDARD;
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66
82
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65
81
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                                                                                                                                       Local Similarity
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                                                                                                                                                                                 81 CLNPAAPMVK 90
                                                                                                                                                                                                  3 CLNPASPIVK 12
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                                                                                              98 AA;
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40
42
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046677:
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GROA_BOVIN
O46676;
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                                                                     DISULFID
                                                                                              SEQUENCE
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                                                                                  DISULFID
                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMITH J.B., HERSCHMAN H.R.;
SMITH J.B., HERSCHMAN H.R.;
"Glucocotticoid-attenuated response genes encode intercellular
mediators, including a new C-X-C chemokine.";
J. Blol. CHEM. 270:16756-16755(1995).
-!- FUNCTION: MAY PARTICIPATE IN THE RECRUITMENT OF INFLAMMATORY CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY INJURED OR INFECTED TISSUE.
-!- INDUCTION: BY LIPPOPLYSACCHARIDE (LPS).
-!- SIMILARITY: BELIOPOPLYSACCHARIDE (LPS).
-:- C-X-C) (CHEMOKINE CXC).
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARIIY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                GROWTH REGULATED PROTEIN HOMOLOG BETA.
BY SIMILARITY.
BY SIMILARITY.
7 2C63B23D CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                 Length 104;
                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                              PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL.
CYTOKINE LIX.
BY SIMILARITY.
BY SIMILARITY.
i S8C45B6B CRC32;
                                                                                                                                                                                                                                                                                                                                                 Score 62; DB 1; Le
Pred. No. 2.23e-03;
3; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
02-0CT-1998 (REL. 36, LAST ANNOTATION UPDATE)
CYTOKINE LIX PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MGD; MGI:1096868; SCYBS.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
HSSP; P02775; INAP.
                                                                                                                                                                                                                                                  POTENTIAL
                                                                                                                                                                                                                                                                31 104 GR
40 66 BY
42 82 BY
104 AA; 10950 MW;
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                                C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                 75.6%;
70.0%;
                                                                                                                                                                                                  EMBL; U95813; G2735497; -.
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                             Local Similarity
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53
55
132 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                82 CLNPTAPMVK 91
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LIX_MOUSE
P50228;
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SEQUENCE
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-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WOLPE S.D., SHERRY B., JUERS D., DAVATELIS G., YURT R.W., CERAMI A.; "Identification and characterization of macrophage inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOCHEMISTRY 37:8303-8313(1998).
-!- FUNCTION: CHEMOTACTIC FOR HUMAN POLYMORPHONUCLEAR LEUKOCYTES BUT DOES NOT INDUCE CHEMOKINESIS OR AN OXIDATIVE BURST.
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PIR; JH020U; J
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SHAO W., JERVA L.F., WEST J., LOLIS E., SCHWEITZER B.I.;
"Solution structure of murine macrophage inflammatory protein-2.";
                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FABRE W., VAN DEVENTER S., CERAMI A.;
"Cloning and characterization of cDNAs for murine macrophage inflammatcry protein 2 and its human homologues.";
J. EXP. MED. 172:911-919(1990).
Score 59; DB 1; Length 132;
Pred. No. 1.32e-02;
4; Mismatches 1; Indels
                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL.1989 (REL. 11, CREATED)
01-FEB-1991 (REL. 17, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2 PRECURSOR (MIP2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROC. NATL. ACAD. SCI. U.S.A. 86:612-616(1989)
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                                                                                                                                                                                                                                                                                                                                                                                                                                           100 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
Query Match 72.0%;
Best Local Similarity 50.0%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
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38
100 AA;
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P10889;
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                                                                                                                                                                                                      ANISOWICZ A., BARDWELL L., SAGER R.;
"Constitutive overexpression of a growth-regulated gene in
transformed Chinese hamster and human cells.",
PROC. NATL. ACAD. SCI. U. S.A. 84.7188-7192(1987).
-!- FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SWALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POWER C.A., PROUDFOOT A.E.I., MAGNENAT E., BACON K., WELLS T.N.C.; "Molecular cloning and characterisation of a neutrophil chemotactic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA; SCIUROGNATHI; MURIDAE; CRICETINAE; CRICETULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 57; DB 1; Length 101;
Pred. No. 4.18e-02;
'''amatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY.
3F83AD41 CRC32;
                               01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-DEC-1992 (REL. 24, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
PLATELET BASIC PROTEIN PRECURSOR (PBP).
      101 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        119 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., AND SEQUENCE OF 40-119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; B28414; B28414.
PROSITE: PS00471; SMALL_CYTCKINES_CXC; 1.
PFAM: PF00048; 118; 1.
HSSP: P10889; 1MI2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GRO PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
                                                                                                                CRICETULUS GRISEUS (CHINESE HAMSTER)
                                                                                GROWTH REGULATED PROTEIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 28 PC
29 101 GR
37 63 BY
39 79 BY
101 AA; 10893 MW; P
                                                                                                                                                                                                                                                                                                       C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69.5%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; J03560; G304509; -.
    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78 ACLNPEAPMV 87
                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 ACLNPASPIV 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=PLATELET;
GRO_CRIGR
P09340;
                                                                                                                               EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JT 11
PF4L_PIG
P43030;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
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Gaps

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Score 58; DB 1; Length 100; Pred. No. 2.35e-02; 3; Mismatches 2; Indels

70.7%; ilarity 54.5%; Conservative

Query Match Best Local Similarity

Matches

9

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MEDLINE;
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                                                                                                                                                                                                                                                                                                                               ó
                                   RANGE=40-119.
(SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDCINE; 89229374.
WENGER R.H., WICKI A.N., WALZ A., KIEFFER N., CLEMETSON K.J.;
"Cloning of cDNA coding for connective tissue activating peptide III from a human platelet-derived lambda gtll expression library.";
BLOOD 73:1498-1503(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE; 91170256.
MAJUMDAR S., GONDER D., KOUTSIS B., PONCZ M.;
"Characterization of the human beta-thromboglobulin gene. Comparison with the gene for platelet factor 4.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Characterization of human platelet basic protein, a precursor form of low-affinity platelet factor 4 and beta-thromboglobulin."; BIOCHEMISTRY 25:1988-1996(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUL-1986 (REL. 01, CREATED)
01-NOV-1991 (REL. 20, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNORATION UPDATE)
PLATELET BASIC PROFIEIN PRECURSOR (PBP) [CONTAINS: CONNECTIVE-TISSUE
ACTIVATING PEPTIDE III (CTAP-III); LOW-AFFINITY PLATELET FACTOR IV
(LA-PF4); BETA-THROMBOGLOBULIN (BETA-TG); NEUTROPHIL-ACTIVATING
PEPTIDE 2 (NAP-2)]
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                   CYTOKINE; GROWTH FACTOR; CHEMOTAXIS; MITOGEN; PLATELET; SIGNAL
                                                                                                                                                                                                                                                                                                                               ;
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PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOLT J.C., HARRIS M.E., HOLT A.M., LANGE E., HENSCHEN A., NIEWIAROWSKI S.;
                                                                                                                                                                                                                                                                                                          Length 119;
                                                                                                                                                                                                                                                                                                                               3; Indels
protein from porcine platelets.";

EUR. J. BIOCHEM. 221:713-719(1994).

-!- FUNCTION: CHEMOATTRACTANT FACTOR FOR NEUTROPHILS.

-!- MASS SPECTROMETRY: MW-8597.5; METHOD-ELECTROSPRAY;

-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                     PLATELET BASIC PROTEIN
                                                                                                                                                                                                                                                                                                         Score 57; DB 1; L/
Pred. No. 4.18e-02;
                                                                                                                                                                                                                                                             SIMILARITY.
SIMILARITY.
6D7F3E47 CRC32;
                                                                                                                                                                                                                                                                                                                                  3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         PRT; 128 AA.
                                                                                                                                                                                 PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
HSSP; P02775; 1NAP.
                                                                                                                                                                                                                               PROBABLE.
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BY
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OR CTAP3 OR TGB1 OR THBGB1.
                                                                                                                                                                                                                                                                                     12615 MW;
                                                                                                                                                                                                                                                                                                          69.5%;
50.0%;
                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                      EMBL; X77935; G457754; -
                                                                                                                                                                                                                                       39
119
80
                                                                                                                                                                                                                                                                                                                                                       94 KICLDPEAPRIK 105
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                                                                                                                                                                                                                                                    40
54
56
119 AA;
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MEDLINE; 86216117.
                                                                                                                                                                                                                                                                                                                                                                                                                        PF4L_HUMAN
P02775;
                                                                                                                                                                                                                                                               DISULFID
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                                                                                                                                                                                                                                                                                     SEQUENCE
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CASTOR C.W., MILLER J.W., WALZ D.A.; "Structural and biological characteristics of connective tissue activating peptide (CTAP-III), a major human platelet-derived growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WALZ A., BAGGIOLINI M.;
"Generation of the neutrophil-activating peptide NAP-2 from platelet basic protein or connective tissue-activating peptide III through monocyte proteases.";
                                                                                                                                                                                                                                                                                                                                                                                                                                  WALZ A., BAGGIOLINI M.;
"A novel cleavage product of beta-thromboglobulin formed in cultures of stimulated mononuclear cells activates human neutrophils.";
BIOCHEM. BIOPHYS. RES. COMMUN. 159:969-981(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CASTOR C.W., WALZ D.A., RAGSDALE C.G., HOSSLER P.A., SMITH E.M., BIGNALL M.C., AARON B.P., MOUNTJOY K.;
"Connective tissue activation. XXXIII. Biologically active cleavage products of CTAP-III from human platelets.";
BIOCHEM. BIOPHYS. RES. COMMUN. 163:1071-1078(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KUNGL A.J., MACHIUS M., HUBER R., SCHWER C., LAM C., ASCHAUER H., LINDLEY I.J.D., AUER M.;
"Purification, crystallization and preliminary X-ray diffraction analysis of recombinant human neutrophil-activating peptide 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Chemical synthesis, purification, and characterization of two inflammatory proteins, neutrophil activating peptide 1 (interleukin-8) and neutrophil activating peptide."; BIOCHEMISTRY 30:3128-3135(1991).
                                                                                                                                                                                                                                                                  BEGG G.S., PEPPER D.S., CHESTERMAN C.N., MORGAN F.J.; "Complete covalent structure of human beta-thromboglobulin."; BIOCHEMISTRY 17:1739-1744(1978).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLARK-LEWIS I., MOSE B., WALZ A., BAGGIOLINI M., SCOTT G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS) OF 59-128.
                                                                                                                                                             PROC. NATL. ACAD. SCI. U.S.A. 80:765-769(1983).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      K-RAY CRYSTALLOGRAPHY OF 59-128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EXP. MED. 171:449-454(1990).
SEQUENCE OF 44-66 AND 125-128. MEDLINE; 83144010.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EBS LETT. 347:300-303(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SYNTHESIS OF 59-126.
MEDLINE, 91175767.
                                                                                                                                                                                                                     SEQUENCE OF 48-126.
                                                                                                                                                                                                                                                 78187279.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89391960
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                                                                                                                                                                                                                                                                                                                                                                                                   89193761
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                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF
MEDLINE; 891
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RATTUS NORVEGICUS (RAT).
                    DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LT 15
CP1B_RAT
Q64678;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
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                                                                                                                                           LT 14
LIX_RAT
P97885;
   VARIANT
            VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYP1B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                           Matches
                                                                                                                                           RESULT
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                                                                                                                                                                                                                                                                                                                                 ő
ALONG WITH PLATELET FACTOR 4 AND PLATELET-DERIVED GROWTH FACTOR. SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MISSING (N-TERMINAL PROCESSING VARIANT). MISSING (N-TERMINAL PROCESSING VARIANT).
                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS
                                                                                                                                                                                                      CYTOKINE; CONNECTIVE TISSUE; GROWTH FACTOR; CHEMOTAXIS; MITOGEN;
                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                    PLATELET BASIC PROTEIN (PBP).
LA-PF4 / CTAP-III.
BETA-THROMBOGLOBULIN.
                                                                                                                                                                                                                                                                                                           Score 57; DB 1; Length 128;
Pred. No. 4.18e-02;
3; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                          13894 MW; 15B7D1DF CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-1994 (REL. 28, CREATED)
01-FEB-1994 (REL. 28, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
SCYB6 OR GCP2.
                                                                                                                                                                                                                                                                                                                                                                                                       75 AA.
                                                                                                                                                                                     PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-X-C) (CHEMOKINE CXC).
PIR: B54188: B54188.
PROSITE: PS00411; SMALL_CYTOKINES_CXC; 1.
PFAM: PF00048; il8; 1.
HSSP; P02775; INAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING.
                                                                                                                                                                                                                                                                NAP-2.
                                                                                                                                                                                                                  PLATELET; SIGNAL; 3D-STRUCTURE.
                                                                                                                             PIR; A24448; A24448.
PIR; A37382; A37382.
PDB; INAP; 19-DEC-95.
PDB; ITVX; 11-JAN-97.
SWISS-2DPAGE; PO2775; HUMAN.
MIM; 121010; -
                                                                                                                                                                                                                                                                                                           69.5%; s.larity 50.0%; E.Conservative
                   C-X-C) (CHEMOKINE CXC).
                                                                                                             EMBL; M54995; G181176; -.
                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                               103 KICLDPDAPRIK 114
                                                                                                                                                                                                                                           444 1
48 1
59 1
63 1
128 AA;
                                                                                                                                                                                                                                                                                                                                                                  1 KACLNPASPIVK 12
                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FISSUE=KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                       GCP2_BOVIN
P80221;
                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VARIANT
                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                               CHAIN
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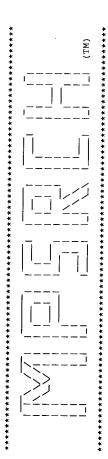
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-SPRAGUE-DAWLEY:
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-! FUNCTION: MAY PARTICIPATE IN THE RECRUITMENT OF INFLAMMATORY CELLS
BY INJURED OR INFECTED TISSUE (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
MISSING (N-TERMINAL PROCESSING VARIANT).
MISSING (N-TERMINAL PROCESSING VARIANT).
BY SIMILARITY.
BY SIMILARITY.
B747167F CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUKARYOTA; METAZOA; CHÓRDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 56; DB 1; Length 130;
Pred. No. 7.39e-02;
5; Mismatches 2; Indels
                                                                                                                                                                                          1; Indels
                                                                                                                                           Length 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
CYTOCHROME P450 1B1 (EC 1.14.14.11) (CYPIB1) (P450RAP).
                                                                                                                                           Score 56; DB 1; Lo
Pred. No. 7.39e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5F6C874C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-UL-1998 (REL. 36, LAST ANNOTATION UPDATE)
CYTOKINE LIX PRECURSOR.
                                                                                                                                                                                          4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                               PRT; 130 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543 AA
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U90448; G1899248; -.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
HSSP; P10899; iMI2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
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130 CJ
76 BJ
93 BJ
14263 MW;
1 8
1 9
12 38
14 54
75 AA; 7931 MW;
                                                                                                                                           68.3%;
50.0%;
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Similarity 41.7%;
5; Conservative
                                                                                                                                                                                          5; Conservative
                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RATTUS NORVEGICUS (RAT)
EUKARYOTA; METAZOA; CHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91 NVCLDPQAPLIK 102
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                                                                                                                                           Query Match
Best Local Similarity
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50
52
130 AA;
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Matches 5; Conser
                                                                                                                                                                                                                                    54 CLDPEAPLIK 63
                                                                                                                                                                                                                                                                                  3 CLNPASPIVK 12
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                                                                                                                                                                                                                                                                                                                                                                                                            "RATE CYPIB1: an adrenal cytochrome P450 that exhibits sex-dependent expression in livers and kidneys of TCDD-treated animals.";
CARCINGRESIS 16:1319-1327(1995).
-!- FUNCTION: CYTOCHROMES P450 ARE A GROUP OF HEME-THIOLATE
MUNOXYGENASES. IN LIVER MICROSOMES, THIS ENZYME IS INVOLVED IN AN
NADPH-DEPENDENT ELECTRON TRANSPORT PARIMAY. IT OXIDIZES A VARIETY
OF STRUCTURALLY UNRELATED COMPOUNDS, INCLUDING STEROIDS, FATTI
ACIDS, AND EXBORIOTICS.
-!- CATALYTIC ACTIVITY: RH + REDUCED FLAVOPROTEIN + O(2) = ROH +
OXIDIZED FLAVOPROTEIN + H(2)O.
                                                                                                          MEDLINE, 95263485.
BHATTACHARYYA K.K., BRAKE P.B., ELTOM S.E., OTTO S.A., JEFCOATE C.R., "Identification of a rat adrenal cytochrome P460 active in polycyclic hydrocarbon metabolism as rat CYPIB1. Demonstration of a unique tissue-specific pattern of hormonal and aryl hydrocarbon receptor-linked regulation.";
J. BIOL. CHEM. 270:11595-11602(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PFAM; PF00067; p450; l. OXIDOREDUCTASE; MONOOXYGENASE; ELECTRON TRANSPORT; MEMBRANE; HEME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OALD LEED FLANDERVIERN HALFOUND. ENDOPLASMIC RETICULUM.
-!- SUBCELLULAR LOCATION: MEMBRANC-BOUND. ENDOPLASMIC RETICULUM.
-!- INDUCTION: BY POLYCYCLIC AROMATIC HYDROCARBONS (PAH) AND BY 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (TCDD).
-!- SIMILARITY: BELONGS TO THE CYTOCHROME P450 FAMILY.
                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
SETAALN=SPRAGUE-DAWLEY; TISSUE=LIVER;
MEDLINE; 95308679.
WALKER N.J., GASTEL J.A., COSTA L.I., CLARK G.C., LUCIER G.W.,
SUTTER T.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 68.3%; Score 56; DB 1; Length 543; Best Local Similarity 60.0%; Pred. No. 7.39e-02; Matches 6; Conservative 3; Mismatches 1; Indels
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                                                                 SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
STRAIN-SPRAGUE-DAWLEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X83867; G853814; -.
EMBL; U09540; G1039377; -.
PROSITE; PS00086; CYTOCHROME_P450; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MICROSOME; ENDOPLASMIC RETICULUM.
BINDING 470 470 HEME
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g
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Search completed: Fri Feb 4 18:03:16 2000 Job time : 8 secs.

2 ACLNPASPIV 11

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 18:02:23 2000; MasPar time 3.57 Seconds 134.678 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-72 (1-12) from US09150813.pep 82 Title: Description: Perfect Score: Sequence:

1 KACLNPASPIVK 12

PAM 150 Gap 15 Scoring table:

122810 seqs, 40068593 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

1:pirl 2:pir2 3:pir3 4:pir4 pir60 Database:

Mean 23.040; Variance 28.486; scale 0.809 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMAPTES

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+[1120]		*					
NO.	Score	Query	Query Match Length	DB	ID	Description	Pred. No.
	82	100.0	107		A28414		
0	77	000		10	1100011	meranoma growchi-stimu	1.5/e-U/
4 (- 1		101	7	187010	macrophage inflammato	3.03e-06
· n	70	85.4	107	a	B38290	GRO-damma precursor -	1.686-04
4	59	72.0	132	~	A57325	C-X-C chemokine LIX -	6.559-02
Ŋ	58	70.7	100	7	JH0200	macrophage inflammato	1 100-01
9	57	69.5	101	7	B28414	growth-regulated prot	1 836-01
7	57	69.5	119	7	S42881	platelet basic protei	1 836-01
۵	57	69.5	128	Н	TGHU	beta-thromboglobulin	1.030
6	26	68.3	75	7	B54188	granulocyte chemotact	3 046-01
10	56	68.3	543	~	I48130	cytochrome P450 1R1 -	3 040-01
11	26	68.3		7	S58444	SUP35 protein - Afric	3.046-01
12	52	67.1		7	164831		5 020-01
13	55	67.1	96	7	A32954	١.	5 020-01
14	55	67.1	6	~	JN0572	neutrophil chemo-attr	5 020-01
15	23	64.6	53	~	151886	macrophage inflammato	1 350+00
16	23	64.6	100	7	S21467		1 350+00
17	53	64.6	100	7	155614		1 35e+00
18	23	64.6	115	7	E71362	hypothetical profein	1 356+00
19	53	64.6	117	~	B44253	alveolar macrophage c	1 350+00
20	51	62.2	75	7	A54188		3 530+00
21	51	62.2	86	7	159277	Mob-1 - rat	
22	51	62.2	114	7	A55010	neutrophil-activating	
23	51	62.2	125	7	JN0470	interferon damma-indu	3 530+00
						Shirt comment of the	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

##molecule_type mRNA ##residues_type mRNA ##cross-references EMBL:X12510; NID:g34621; PID:g34622 REFERENCE A60401 #authors Schroeder, J.M.; Sticherling, M.; Henneicke, H.H.; Preissner, W.C.; Christophers, E.

24 51 25 25 26 25 27 50 28 28 51 28 29 50 39 30 50 31 50 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 31 49 32 49 34 49 36 49 41 49 42 49 43 49 42 49 43 49 44 49 42 49 43 49 42 49 43 49 45 49 48 49 48 49 48 49 49 49 49 49 40 49 40 49 41 49 41 49 42 49 43 49 43 49 44 49 45 49 45 49 41 49 41 49 42 49 43 49 43 49 44 49 45 49 41 49 41 49 41 49 42 49 43 49 43 49 41 49 41 49 42 49 43 49 41 49 41 49 41 49 42 49 43 49 41

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ACCESSIONS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proost, P.; De Wolf-Peeters, C.; Conings, R.; Opdenakker, G.;
                   #title IL-lalpha or tumor necrosis factor-alpha stimulate release of three NAP-1/IL-8-related neutrophil chemotactic proteins in human dermal fibroblasts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schröeder, J.M.; Persoon, N.L.M.; Christophers, E. J. Exp. Med. (1990) 171:1091-1100
Lipopolysaccharide-stimulated human monocytes secrete, apart from neutrophil-activating peptide l/interleukin 8, a second neutrophil-activating protein. NH-2-terminal amino acid sequence identity with melanoma growth stimulatory activity.
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#product melanoma growth-stimulatory activity #status
experimental #label MAT
#length 107 #molecular-weight 11301 #checksum 1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #journal J. Immunol. (1993) 150:1000-1010
#title Identification of a novel granulocyte chemotactic protein (GCP-2) from human tumor cells. In vitro and in vivo comparison with natural forms of GRO, IP-10, and IL-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JH0281 #type complete
macrophage inflammatory protein 2 alpha precursor - human
macrophage inflammatory protein beta; melanoma
gro-beta; growth regulated protein beta; melanoma
growth.stimulatory activity; monocyte adherence-induced
                                                                                                                                                                                                                              Golds, E.E.; Mason, P.; Nyirkos, P.
Biochem. J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion of protein and a neutrophil chemotactic factor but not beta-2--microglobulin in human synovial cells and fibroblasts.
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30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change
31-Oct-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                               35-41,'X',43-49,'X',51-52,'XX',55-57 ##label GOL
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                                                                                                                                          ##molecule_type protein
##residues 35-42, X', 44, X', 46-48 ##label SCH
##experimental_source dermal fibroblasts
SNCE S03975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##residues 35-63,'X',65 ##label SC2 ##experimental source LPS-stimulated monocytes AMCE A46519
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##experimental_source MG-63 osteosarcoma cells
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Pred. No. 1.57e-07;
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  J. Immunol. (1990) 144:2223-2232
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#accession S03976
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CLASSIFICATION #superfam:
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#product macrophage inflammatory protein 2 alpha #status
    predicted #label MAT
#length 107 #molecular-weight 11389 #checksum 929
                                                                                                                                                                                                                                                                                                                                  lida, N.; Grotendorst, G.R. Mol. Cell. Biol. (1990) 10:5596-5599 Cloning and sequencing of a new gro transcript from activated human monocytes: expression in leukocytes and wound tissue.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sporn, S.A.; Elerman, D.F.; Johnson, C.E.; Morris, J.;
Martin, G.; Ladner, M.; Haskill, S.
J. Immunol. (1990) 1444444444414
Monocyte adherence results in selective induction of novel
genes sharing homology with mediators of inflammation and
                                            #authors Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; McClain, J.;
Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.
#journal J. Exp. Med. (1990) 172:911-919
#title Cloning and characterization of cDNAs for murine macrophage
inflammatory protein 2 and its human homologues.
#cross-references MJID:90354792
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growth-regulated protein gamma; macrophage inflammatory
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31-May-1991 #sequence_revision 27-Oct-1995 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ##residues 1-107 ##label IID
##cross-references GB:M57731; GB:M36964; NID:g183626; PID:g183627
NCE A38290
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                                                                                                                                                                                                                              ##molecule_type mRNA
##residues 1-107 ##label TEK
##cross-references GB:X53799; NID:g34658; PID:g34659
:NCE A35931
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JH0281; A35931; A38290; A60407
JH0200
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#authors Proost, P.; De Wolf-Peeters, C.; Conings, R.; Opdenakker, G.; Billiau, A.; Van Damme, J.

#journal J. Immunol. (1993) 150:1000-1010

#title Identification of a novel granulocyte chemotactic protein (GCP-2) from human tumor cells. In vitro and in vivo comparison with natural forms of GRO, IP-10, and IL-8.
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J. Biol. Chem. (1995) 270:16756-16765
Glucocorticoid-attenuated response genes encode intercellular
mediators, including a new C-X-C chemokine.
Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.

#journal J. Exp. Med. (1990) 172:911-919
#title Cloning and characterization of cDNAs for murine macrophage
inflammatory protein 2 and its human homologues.
#cross-references MUID:90354792
                                                                                                                                                                                                                                               #authors Haskill, S.; Peace, A.; Morris, J.; Sporn, S.A.; Anisowicz,
A.; Lee, S.W.; Smith, T.; Martin, G.; Ralph, P.; Sager, R.
#journal Proc. Natl. Acad. Sci. U.S.A. (1990) 87:7732-7736
#title Identification of three related human GRO genes encoding
cytokine functions.
#cross.references MUID:91017578
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C-X-C chemokine LIX - mouse
GARG-8/LIX; glucocorticocoid-attenuated response gene 8
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CLASSIFICATION #superfamily beta-thromboglobulin
#length 132 #molecular-weight 14190 #checksum 2181
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#length 107 #molecular-weight 11342 #checksum 2559
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Pred. No. 1.68e-04;
":.matches 0; Indels
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##residues
##cross-references GB:M36821; NID:9183632; PID:9183633
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##eross-references GB:X53800; NID:934662; PID:934663
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##residues 35-52 ##label PRO
##experimental_source MG-63 osteosarcoma cells
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Pred. No. 6.55e-02;
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Best Local Similarity 90.9%;
Matches 10; Conservative
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Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.
J. Exp. Med. (1990) 172:911-919
#title Cloning and characterization of cDNAs for murine macrophage
#cross-references MUID:90354792
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#product macrophage inflammatory protein 2 #status
experimental #label MAT
#length 100 #molecular-weight 10621 #checksum 8720
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       Gaps
                                                                                                                                                                                                            macrophage inflammatory protein 2 precursor - mouse #formal_name Mus musculus #common_name house mouse 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 08-Sep-1997
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##residues 1-100 ##label TEK
##cross-references GB:X53798; NID:g53128; PID:g53129
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##residues 28-59 ##label WOL
IFICATION #superfamily beta-thromboglobulin
RDS heparin binding
  Mismatches
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1 KACLNPASPIV 11
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##cross-references GB:M54995; NID:9181175; PID:9181176 ##note the authors translated the codon GAT for residue 109 as
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beta-thromboglobulin precursor - human connective-tissue activating peptide III; CTAP-III; histamine-releasing factor; neutrophil-activating peptide
                                                                                                                                                                                                                                                                                                                                                           platelet basic protein - pig
#formal_name Sus scrofa domestica #common_name domestic pig
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
#domain signal sequence #status predicted #label SIG\
#product growth-regulated protein #status predicted
#label MAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Majumdar, S.; Gonder, D.; Koutsis, B.; Poncz, M.
#journal J. Biol. Chem. (1991) 266:5785-5789
#title Characterization of the human beta-thromboglobulin gene.
#cross-references WUID:91170256
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A39546; A37382; A24448; PL0222; A93982; A90411; A60709;
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#cross-references MUID:94229068
#accession $43460
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FICATION #superfamily beta-thromboglobulin
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Pred. No. 1.83e-01;
2; Mismatches 1; Indels
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Eur. J. Biochem. (1994) 221:713-719
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Pred. No. 1.83e-01;
3; Mismatches 3;
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Best Local Similarity 50.0%;
Matches 6; Conservative
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Local Similarity 70.0%;
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#journal Biochemistry (1986) 25:1988-1996
#title Characterization of human platelet basic protein, a precursor form of low-affinity platelet factor 4 and beta-thromboglobulin.
#cross-references MuID:86216117
#accession A244.0
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#journal J. Clin. Invest. (1990) 85:1516-1521
#title Relationship of one form of human histamine-releasing factor to connective tissue activating peptide-III.
#cross-references MUID:90237229
#accession A60709
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J. Exp. Med. (1990) 171:449-454
Generation of the neutrophil-activating peptide NAP-2 from platelet basic protein or connective tissue-activating peptide III through monocyte proteases.
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Proc. Natl. Acad. Sci. U.S.A. (1983) 80:765-769
Structural and biological characteristics of connective tissue activating peptide (CTAP-III), a major human platelet-derived growth factor.
peptide III from a human platelet-derived lambdagtII expression library. #cross-references MUID:89229374 #accession A37382
                                                                                                                          ##molecule_type mRNA
##residues 1-128 ##label WEN
##cross-references GB:M34995; NID:g181175; PID:g181176; GB:M38441
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##residues 59-62,'X',64-79 ##label KA2
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##residues 44-62,'X',64-79 ##label BAE
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##residues 44-66;125-128 ##label CAS
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##residues 44-61, 'XX', 64 ##label KAP
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##residues 48-128 ##label BEG
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##residues 54-67 ##label WAL
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##residues 35-53 ##label HOL
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                                                                       δ
                                                       There appears to be a second beta-thromboglobulin-like human gene.

There appears to be a second beta-thromboglobulin-like human gene.

Connective-tissue activating peptides (CTAP) are a group of proteins capable of activating connective tissue cells. CTAP-I.

II, -III and -P2, and -PMN are of lymphoid, tumor cell, human platelet, and polymorphonuclear leukcyte origin, respectively.

CTAP-III, a monomer isolated from platelets, stimulates DNA synthesis, mitosis, glycolysis, intracellular CAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfared glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by human synovial cells.

Proteolytic removal of the first four residues of CTAP-III produces the active peptide beta-thromboglobulin, which is released from platelets along with platelet factor 4 and platelet-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A.; Opdenakker, G.; Van Damme, J.
Blochemistry (1993) 32:10170-10177
Human and bovine granulocyte chemotactic protein-2: complete
amino acid sequence and functional characterization as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proost, P.; Wuyts, A.; Conings, R.; Lenaerts, J.P.; Billiau,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #domain signal sequence #status predicted #label SIGN #domain propeptide #status predicted #label PRON #product connective-tissue activating peptide III #Status experimental #label CTAPN #product beta-thromboglobulin #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence extracted from NCBI backbone (NCBIP:137967) #superfamily beta-thromboglobulin #length 75 #molecular-weight 7931 #checksum 8842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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#formal_name Bos primigenius taurus #common_name cattle
13.5ep-1994 #sequence_revision 18-Nov-1994 #text_change
12-Apr-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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experimental #label NAP2\
#disulfide bonds #status experimental
#length 128 #molecular-weight 13894 #checksum 6910
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Pred. No. 3.04e-01;
4; Mismatches 1; Indels
diffraction analysis of recombinant human neutrophil-activating peptide 2 (rhNAP-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    growth factor; homotetramer; platelet
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#superfamily beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     ##cross-references GDB:127391; OMIM:121010
#map_position 4p12-4q13
#introns 50/1; 95/2
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##molecule_type protein
##residues 1-75 ##label PRO
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                                         #cross-references MUID:94307404
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#cross-references MUID:94001982
#accession B54188
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Local Similarity 50.0%;
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larity 50.0%;
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Best Local Similarity
Matches 5; Conserv
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Walker, N.J.; Gastel, J.A.; Costa, L.T.; Clark, G.C.; Lucier,
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#formal_name Xenopus laevis #common_name African clawed frog
10-Apr-1996 #sequence_revision 19-Apr-1996 #text_change
                                                                                                                                                                                                 #authors Bhattacharyya, K.K.; Brake, P.B.; Eltom, S.E.; Otto, S.A.;
Jefcoate, C.R.
#journal J. Biol. Chem. (1995) 270:11595-11602
#title Identification of a rat adrenal cytochrome P450 active in polycyclic hydrocarbon metabolism as rat CYPIBI.
Demonstration of a unique tissue-specific pattern of hormonal and aryl hydrocarbon receptor-linked regulation.
#cross-references MUID:95263485
#accession 148130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #superfamily human cytochrome P450 CYP2D6; cytochrome P450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "binding_site heme iron (Cys) (axial ligand) #status
                                                                                    #formal_name Rattus norvegicus #common_name Norway rat
15-Mar-1996 #sequence_revision 15-Mar-1996 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G.W.; Sutter, T.R.

Carcinogenesis (1995) 16:1319-1327

Rat CYPIB1: an adrenal cytochrome P450 that exhibits sex dependent expression in livers and kidneys of TCDD-treated animals.
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#length 543 #molecular-weight 60556 #checksum 2773
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68.3%; Score 56; DB 2; Length 543; 60.0%; Pred. No. 3.04e-01; vative 3; Mismatches 1; Indels
148130 #type complete cytochrome P450 1B1 - rat cytochrome P450RAP
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#accession I52733
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Best Local Similarity
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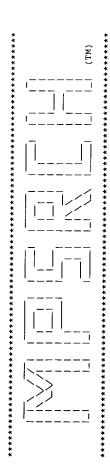
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#map_position 5
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                                                                                                                                                                                                           #domain translation elongation factor Tu homology #label
                                                                                ##residues 1-614 ##label ZHO ##cross-references EMBL:L37045; NID:9976218; PID:9976219 ##note the authors translated the codon AGG for residue 573 as
                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #authors Huang, S.; Paulauskis, J.D.; Godleski, J.J.; Kobzik, L.
#journal Am. J. Pathol. (1992) 141:981-988
#title Expression of macrophage inflammatory protein-2 and KC mRNA
#cross-references MUID:93035653
#accession 164831
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gro protein; growth regulated protein; melanoma
growth-stimulating activity factor; melanoma mitogenic
protein; secretory protein N31
#formal_name Mus musculus #common_name house mouse
20-oct-1989 #sequence_revision 20-oct-1989 #text_change
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#formal_name Rattus sp. #common_name rat
02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change
                                                                                                                                                        *superfamily translation elongation factor Tu homology GTP binding; P-loop
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#region GTP-binding NKXD motif
#length 614 #checksum 4981
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                                                                                                                                                                                                                                                                                                              Length 614;
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J. Biol. Chem. (1989) 264:4133-4137
                                                                                                                                                                                                                                                                                                              Score 56; DB 2; Le
Pred. No. 3.04e-01;
5; Mismatches 1;
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#length 53 #checksum 8839
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                                          ##molecule_type mRNA
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Best Local Similarity 60.0%;
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Best Local Similarity 45.5%;
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#authors Ryseck, R.P.; MacDonald-Bravo, H.; Mattei, M.G.; Bravo, R. #journal Exp. Cell Res. (1989) 180:266-275
#title Cloning and sequence of a secretory protein induced by growth factors in mouse fibroblasts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ##residues 1-32,'S',34-96 ##label HUA ##residues 1-32,'S',34-96 ##label HUA ##cross_references GB:M86536 ##experimental_source alveolar macrophage ##note codon AGT for residue 33 as Cys, AAC for residue 46 as Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
The platelet-derived growth factor-inducible KC gene encodes a secretory protein related to platelet alpha-granule
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Biochem. Biophys. Res. Commun. (1992) 184:922-929
Rat KC CDNA Cloning and mRNA expression in lung macrophages
and fibroblasts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##cross-references DDBJ:D11445; NID:g391854; PID:d1002491; PID:g220755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #domain signal sequence #status predicted #label SIG\
#product gro-alpha #status predicted #label MAT
#length 96 #molecular-weight 10254 #checksum 5052
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JN0572 #type complete
neutrophil chemo-attractant Gro protein precursor - rat
CINC; cytokine-induced neutrophil chemoattractant;
interleukin-8-like chemokine
formal_name Rattus norvegicus #common_name Norway rat
30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                sidues 1-96 ##label RYS
This protein is basic and lacks threonine, phenylalanine, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Watanabe, K.; Konishi, K.; Fujioka, M.; Kinoshita, S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #authors Konishi, K.; Takata, Y.; Yamamoto, M.; Yomogida, K.; #authors Watanabe, K.; Tsurufuji, S.; Fujioka, M. Gene (1993) 126:285-286
#journal Gene (1993) 126:285-286
#title Structure of the gene encoding rat neutrophil chemo-attractant Gro.
#cross-references_MUID:93246259
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                                                                                                                                             ##molecule_type mRNA
##residues 1-96 ##label OQU
##cross-references GB:J04596; NID:9201042; PID:9201043
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Pred. No. 5.02e-01;
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extracellular protein
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##residues 1-96 ##label KON
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#accession JQ1519
                                                                                          #cross-references MUID:89139485
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Local Similarity 60.0%;
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#accession
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#product neutrophil chemo-attractant Gro protein #status
experimental #label CYT
gth 96 #molecular-weight 10249 #checksum 5749
J. Biol. Chem. (1989) 264:19559-19563
The neutrophil chemoattractant produced by the rat kidney epithelioid cell line NRK-52E is a protein related to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanzawa, H.; Haruyama, H.; Watanabe, K.; Tsurufuji, S.
FEBS Lett. (1994) 354:207-212
The three dimensional structure of rat cytokine CINC/Gro in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Huang, S.; Paulauskis, J.D.; Godleski, J.J.; Kobzik, L.
#journal Am. J. Pathol. (1992) 141:981-988
#title Expression of macrophage inflammatory protein-2 and KC mRNA in pulmonary inflammation.
#cross-references MUID:9303562
                                                                                                                                                                                                           #authors Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda, T.; Komorita, N.; Watanabe, K.; Miyai, H.
T.; Komorita, N.; Watanabe, K.; Miyai, H.
Blochem. Pharmacol. (1993) 45:1425-1430
Froduction of an interleukin-8-1ike chemokine by cytokine-stimulated rat NRK-49F fibroblasts and its suppression by anti-inflammatory steroids.
                                                                                                                                                                                                                                                                                                                                                                                                 ##status preliminary
##molecule_type protein
##residues 25-57 ##label NA2
##experimental_source kidney, NRK-49F fibroblasts
##note sequence extracted from NCBI backbone (NCBIP:129131)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sidues 25-96 ##label HAN
This protein has chemotactic activity for neutrophils and has melanoma growth-stimulating activity.
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#formal_name Rattus sp. #common_name rat
12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            annotation; conformation by (1)H-NMR, residues 25-96
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24/1; 65/2; 92/2
#superfamily beta-thromboglobulin
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                                                                                                                                    ##molecule_type protein
##residues 25-96 ##label WAT
                                                        #Cross-references MUD:90062049
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I51886
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2 ACLNPASPIV 11
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Gaps
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##Status preliminary; translated from GB/EMBL/DDBJ###molecule_type mRNA ##resident
                                                                                                                                                                                       1; Indels
                                                                                                                                                      Length 53;
                                                                                                                                                  Score 53; DB 2; Le
Pred. No. 1.35e+00;
2; Mismatches 1;
                                                                      ##cross-references GB:S45855; NID:9257054
FICATION #superfamily beta-thromboglobulin
X #length 53 #checksum 9622
                                                                                                                                                                                                                                                                                                                 completed: Fri Feb 4 18:02:50 2000 ne : 27 secs.
                                                      1-53 ##label RES
                                                                                                                                                Query Match 64.6%;
Best Local Similarity 66.7%;
Matches 6; Conservative
                                                                                                                                                                                                                        40 CLNPEAPLV 48
                                                                                                                                                                                                                                                         3 CLNPASPIV 11
                                                        ##residues
                                                                                         CLASSIFICATION
                                                                                                                                                  Query Match
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Fri Feb 4 18:01:46 2000; MasPar time 3.52 Seconds 72.537 Million cell updates/sec

Tabular output not generated.

Title: >US-09-150-813-72
Description: (1-12) from US09150813.pep
Perfect Score: 82

Sequence: 1 KACLNPASPIVK 12

Scoring table: PAM 150 Gap 15 Searched: 170751 seqs, 21266608 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

a-geneseq35
l:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part1 2:part2 10:part10 11:part11 12:part13 13:part13 14:part14 15:part14 15:part15 16:part16 17:part11 17:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 30:part39 31:part31 32:part32 33:part33 34:part39 35:part39 36:part39 37:part37 38:part38

Statistics: Mean 16.819; Variance 48.942; scale 0.344

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		ρ					
Result No.	Score	Query Match	Query Match Length	DB	ID	Description	Pred. No.
	111111			1		****************	
1	82	100.0	70	20	R99809	Chemokine-like protei	1 210-02
7	82	100.0	73	39	W81498	Human mature gro-alph	1 210-02
ю	82	100.0	73	24	W17670	Human chemokine aro a	1 216-02
4	82	100.0	73	25	W18024	Human chemokine gro a	1 210-02
S	82	100.0	73	12	R66698	Human gro-alpha chemo	1.21e-02
9	82	100.0	101	20	R92318	Chemokine-like protei	1 216-02
7	82	100.0	107	13	R70792	Melanoma growth stimu	1 216-02
∞	77	93.9	73	39	W81499	human gro-beta polype	5 070-02
σ	77	93.9	73	25	W18025	Himan chemokine aro h	5 070.0
10	77	93.9	73	24	W17671	Hilman chemokine gro b	0.070
11	77	93.9	73	12	R66699	Human gro-beta chemok	5 070-02
12	77	93.9	73	7	R36771	MTP-2alpha	5 070-02
13	77	0 20	102	7	D70703	Cro-bots Acto-	20.07.02
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14	//	93.9	107	4	R23034	Human Gro beta cytoki	5.07e-02
15	77	93.9	107	4	R20529	Human macrophage infl	5.07e-02
16	77	93.9	107	4	R20589	Human macrophage infl	5 070-02
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Active domain from me Putative glycan bindi GRO alpha. Human mature gro-gamm Human chemokine gro g Protein used to gener Human oremokine gro g Human pro-gamma chemokine gro g Human gro-gamma chemokine gro gamma crophage infl Human macrophage infl Human macrophage infl Murine macrophage inf Macrophage derived in Heparanase C-terminal NAP-2. Neutrophil-activating Synthetic NaP-2v. Connective tissue act Sequence encoded by strective tissue act Sequence encoded by strective the size proteil Leukocyte derived gro Precursor of platelet	מכן דאכת אד
R89808 WW10292 WW10292 WW10292 WW10292 WW10293 WW102434 WW12434 WW12434 WW102530 R820530 RR2040 RR2053	,
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ALIGNMENTS

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chemokine-like proteins with active domains from different chemokine(s) - provide modified activities, which exhibit high myelo-suppressive activity

Claim 14; Page 80; 115pp; English.

This is a novel chemokine-like protein (PF4-414), based on platelet factor-4 (PF-4), with 4 conserved cysteine residues. The protein
                                                                                                                                                                                                                                                                                                                                         /note= "Gro-alpha active domain (R99808, claim 13)"
                                           22-MAR-1997 (first entry)
Chemokine-like protein PF4-414.
Chemokine-like protein PF4-414.
Muman: chemokine: PF4-414; platelet factor-4; mutant; Gro-alpha; active domain; melanoma growth stimulating factor-alpha; myelosuppressive; cytostatic; antitumour; leukaemia; polycythaemia vera; hypermakaryocytopoiesis; therapy; diagnostic; myeloid progenitor cell; expansion; bone marrow transplantation.
                                                                                                                                                                                      7..9
/note= "Platelet factor-4 active domain (R99823,
                                                                                                                                                                                                                                                                            /note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                                                           /note= "Conserved Cys residue"
                                                                                                                                                                                                                                            note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                                                                                                                        /note= "Conserved Cys residue"
                                                                                                                                                                      Location/Qualifiers
 T 1
R99809 standard; peptide; 70 AA.
                                                                                                                                                                                                                    claim 1)"
                                                                                                                                                                                                                                                                                                                                                                                                                26-0CT-1995; U13897.
26-0CT-1994; US-330163.
07-JUN-1995, US-482111.
(REPK ) REPLIGEN CORP.
Daly TJ. Larosa GJ;
WPI: 96-239500/24.
N-PSDB; T30206.
                                                                                                                                                                                                                                                           misc_difference 12
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                                                                                                                                                                                                                                                                                                                                                        misc_difference
                                                                                                                                                                                                                                                                                                                                                                                     WO9613587-A1.
                                                                                                                                                        Homo sapiens.
                              R99809;
22-MAR-1997
                                                                                                                                                                                    active_site
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                                                                                                                                                                                                                                                                                                                           active_site
RESULT
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has been modified by replacing the 2nd active domain (DLQ, R92319)
with an active domain from melanoma growth stimulating factor-alpha (Gro-alpha, R99808). The resulting protein has the PF-4 lst active domain, DLQ, before the 1st Cys residue, and the Gro-alpha domain ceplaces a 2nd DLQ sequence present in wild-type PF-4 after the 4th Cys residue. A version with a signal peptide is given in R92318. The sequence has been derived by mutagenesis of wild-type PF-4 (R99813). The active domains are required for myelosuppressive activity. The novel chemokine shows higher activity than the willd-type, and may be used to suppress proliferation of actively dividing myeloid cells, as an adjunctive agent in chemotherapy or radiation therapy, in therapy of myelogenous leukaemia, polycythaemia vera or hypermegakaryocytopoietic disorders, or detect, isolate and expand show adverse neutrophil activation or inflammatory side-effects.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treating and preventing sepsis in animals - by using two modified

Treating and preventing sepsis in animals - by using two modified

Treating and preventing with an anti-infective agent

Stample 1; Page 18; Zepp; English.

This is the amino acid sequence of the human gro-alpha chemokine
mature polypeptide. The invention relates to a method of preventing
and treating sepsis using chemokines selected from mature or
modified murine KC (see W81497), or human gro-alpha, gro-beta (see
W81499) or gro-gamma (see W81499). A claimed method uses a dimer
composed of 2 modified gro-beta chemokines. Further claimed is
agent. The chemokine in conjunction with an anti-infective
agent. The chemokine spasis since antimicrobial agents alone have
failed to abrogate septic mortality.
                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Human chemokine gro alpha.

Gro alpha: chemokine; intercrine; myelosuppression;

Immunosuppression; haematopoietic cell; infection; cancer;
aplastic anaemia; autoimmune disease; stem cell transplant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human mature gro-alpha polypeptide used to treat sepsis.
Gro-alpha; chemokine; human; sepsis; septic shock; therapy.
                                                                                                                                                                                                                                                                                                                                                        Score 82; DB 20; Length 70;
Pred. No. 1.21e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 82; DB 39; Length 73;
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29-ARR-1997; US-846966.
SMIT MAITHKLINE BEECHAM CORP.
Demarsh PL. Johanson KO;
WPI; 99-024031/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T 2
W81498 standard; Protein; 73 AA.
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                                                                                                                                                                                                                                                                                                                                                        Match 100.0%;
Local Similarity 100.0%;
es 12; Conservative
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                                                                                                                                                                                                                                                                                                                  70 AA;
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WO9848828-A1.
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Treating myelosuppression or any condition involving
Treating myelosuppression or any condition involving
Treating myelosuppression or any condition involving
Treating myelosuppression or low levels of haematopoietic cells
Claim 1; Page 20; 31pp; English.

Claim 2; Page 20; 31pp; English.

Claim 3; Page 20; 31pp; English.

Claim 4; Page 20; 31pp; English.

Claim 6; Page 20; 31pp; English.

Claim 7; Page 20; 31pp; English.

Claim 6; Page 20; 31pp; English.

Claim 7; Page 20; 31pp; English.

Claim 1; Page 20; 31pp; English.

Claim 2; Page 20; 31pp; English.

Claim 1; Page 20; 31pp; English.

Claim 1; Page 20; 31pp; English.

Claim 6; Page 20; 31pp; English.

Claim 6; Page 20; 31pp; English.

Claim 6; Page 20; 31pp; Page 2
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DeMarsh PL, Johanson KO;

WPI; 97-298111/27.

Use of chemokine(s) such as KC and gro-alpha - to treat or prevent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sepsis, particularly septic shock claim 1; Page 18-19; 28pp; English.

A claimed method of treating or preventing sepsis comprises administering to an animal an effective amount of a chemokine selected from mature murine KC (see W18023), human gro alpha (W18024), human gro bete (see W18025) and human gro alpha W18056), modified fragments of these chemokines and multimeric proteins comprising an association of two chemokine proteins.
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Sepsis; septic shock; therapy; gro alpha; chemokine; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 82; DB 24; Length 73;
Pred. No. 1.21e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "preferred modified fragment of KC
                                                                    /note= "preferred polypeptide (Claim 3)"
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                      Location/Qualifiers
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W18024 standard; protein; 73 AA.
                                                                                                                                                                                            SMIK ) SMITHKLINE BEECHAM CORP.
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Matches 12; Conservative
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21-NOV-1995; US-007425.
                                                                                                                                                              US-547262.
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                                                                                                                                                                                                                      King AG, Pelus LM;
WPI; 97-258957/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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  Homo sapiens.
                                                                                           W09715595-A1.
                                                                                                                                            24-0CT-1996;
24-0CT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         39-MAY-1997
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Sepsis can occur in hospitalised patients, and a consequence of bacterial sepsis is septic shock. The method of the invention provides a treatment for sepsis, particularly septic shock, which is a major cause of death in intensive care units. Septic shock syndrome apparently has intractable resistance to the effects of a variety of highly potent antimicrobial agents. Survival is increased by treatment with the chemokines, both prophylactically and after infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-1997 (first entry)
Chemokine-like protein PF4-414.
Unumnin, chemokine; PF4-414; platelet factor-4; mutant; Gro-alpha; active domain; melanoma growth stimulating factor-alpha; myelosuppressive; cytostatic; antitumour; leukaemia; polycythaemia vera; hypermakaryocytopoiesis; therapy; diagnostic; myeloid progenitor cell; expansion; bone marrow transplantation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     New truncated chemokine with increased biological activity - and
                                                                                                                                                                                                                                                                               Gro-alpha protein; chemokine; inflammation; antiinflammatory; hematopoietic synergistic factor; HSF; hematopoietic precursor; bone marrow; intercrine; desamino gro-alpha; truncation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               related multimers, nucleic acid, antibodies etc., for treating inflammation, stimulating growth of bone marrow etc., also peptide(s) for inducing haematopoietic synergistic factor. Disclosure; Page 51; 89pp; English.

Truncated, desamino chemokine comprising amino acids 5-73 of human mature gro-alpha (full sequence given in R66698) shows enhanced biological activity when compared to the mature protein, and has been used to prepare multimeric, modified
                                                                                                                                                                                                                                                                                                                                        5..732
/note= "desamino truncated gro-alpha, claim 7,
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0
                                                                                                                 Score 82; DB 25; Length 73;
Pred. No. 1.21e-02;
0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 82; DB 12; Pred. No. 1.21e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Pelus LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  King AG,
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R66698 standard; protein; 73 AA.
                                                                                                                 / Match
Local Similarity 100.0%;
les 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                    Human gro-alpha chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                              page 69"
                                                                                                                                                                                                                                                                                                                                                                                                           US-073800.
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                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 95-036402/05.
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                                                                                             73 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                           08-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Balcarek JM,
                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                        19-JUL-1995
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                                                                                             Seguence
                                                                                                                  Query Match
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The composition of the properties activities, which exhibit high disclosure; Fig 3C; 115pp; English.

Disclosure; Fig 3C; 115pp; English.

Disclosure; Fig 3C; 115pp; English.

This is a novel chemokine-like protein (FF4-414), based on platelet factor-4 (PP-4), with 4 conserved cysteine residues. The protein has been modified by replacing the 2nd active domain (DLO, R92319) with an active domain from melanoma growth stimulating factor-alpha (Gro-alpha, R99808). The resulting protein has the PF-4 ist active domain, DLO, before the 1st Cys residue, and the Gro-alpha domain replaces a 2nd DLO sequence present in wild-type PF-4 after the 4th Cys residue. A version without the signal peptide is given in R99809 (claim 14). The sequence has been derived by mutagenesis of wild-type PF-4 (R99813). The active domains are required for myelosuppressive activity. The novel chemokine shows higher activity than the wild-type, and may be used to suppress proliferation of than the wild-type, and may be used to suppress proliferation of actively dividing myeloid cells, as an adjunctive agent in chemotherapy or radiation therapy, in therapy of myelogenous leukemia, playchaemia vera or hypermegakaryocytopoietic disorders, cor to detect, isolate and expand progenitor cells ex vivo for transplantation. The protein does not show adverse neutrophil activation or inflammatory side-effects.
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Melanoma growth stimulatory activity; gro/MGSA; heparanase; heparin;
heparan sulfate; arthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       "Gro-alpha active domain (R99808, claim 13)"
                                                                                    38..40
/note= "Platelet factor-4 active domain (R99823)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chemokine-like proteins with active domains from different chemokine(s) - provide modified activities, which exhibit high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
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                         32 .101
/note= "Mature PF4-414 (R99809, claim 14)
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                                                                                                                                                                                                                                                                                                                            /note= "Conserved Cys residue"
80..90
                                                                                                                                                                                                                  /note= "Conserved Cys residue"
                                                                                                                                                                                                                                                                            'note= "Conserved Cys residue"
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/note= "Signal peptide"
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Best Local Similarity 100.0%;
Matches 12; Conservative
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29-AUG-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ledbetter SR;
                                                                                                                                                        claim 1)"
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29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
(UPJO) UPJOHN CO.
HOOGWERF AJ, Ledbetter S
                                                                                                                                                                                                                                                                                                                                                                                                          note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-330163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-JUN-1995; US-482111.
(REPK ) REPLIGEN CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-1995; U13897.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Daly TJ, Larosa G.
WPI; 96-239500/24.
N-PSDB; T30206.
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WO9504158-A.
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Demarsh PL, Johanson KO;

NR WI; 99-024031/02.

Treating and preventing sepsis in animals - by using two modified group by chemokines in conjunction with an anti-infective agent group bechanding in standard sequence of the human chemokine gro-beta mature polypeptide. The invention relates to a method of mature polypeptide mine RC (see W8149).

Treating and treating sepsis using chemokine selected from mature or modified murine RC (see W8149), or human gro-alpha (see W81498), gro-beta or gro-gamma (see W81499). A claimed method uses a dimeric chemokine consisting of 2 covalently linked modified cro-beta proteins (amino acids 5.73 of the mature polypeptide)

In which the proteins are linked by 2 intermolecular disulphide bonds between C5-C31 and C7-C47. Further claimed is administering the chemokine described in this invention are required to treat and provent sepsis since antimicrobial agents alone have failed to a program and appropries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                       Gaps
      N-PSDB; 085362.

Screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 12; Page 39; 60pp; English.

Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
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                                                                                                                                                                            Score 82; DB 13; Length 107;
Pred. No. 1.21e-02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                 01-WAR-1999 (first entry) human gro-beta polypeptide used to treat sepsis. Gro-beta; chemokine; human; sepsis; septic shock; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-378-1998 (first entry)
Human chemokine gro beta.
Sepsis; septic shock; therapy; gro beta; chemokine; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 77; DB 39; Length 73; Pred. No. 5.07e-02; 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             /note= "claimed fragment"
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                                                                                                                                                                                                                                                                                              .T 8
W81499 standard; Protein; 73 AA.
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                                                                                                                                                                            / Match
Local Similarity 100.0%;
les 12; Conservative
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Best Local Similarity 91.7%;
Matches 11; Conservative
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29-APR-1997; US-846966.
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                                                                                                                                                                                                                               83 kaclnpaspivk 94
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WPI; 95-082239/11.
                                                                                                                                                      107 AA;
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                                                                                                                                                      Sequence
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                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                        W81499;
                                                                                                                                                                                                                                                                                                                                                                                                     Protein
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Demarsh PL, Johanson KO:

WPI: 97-298111/27.

WPI: 97-298111/27.

Use of chemokine(s) such as KC and gro-alpha - to treat or prevent sepsis, particularly septic shock
Claim 1; Page 19; 28pp; English.

Claim 1; Page 19; 28pp; English.

A claimed method of treating or preventing sepsis comprises
administering to an animal an effective amount of a chemokine
selected from mature murine KC (see W18023), human gro alpha (see
XI 818024), human gro batea (W18025) and human gro gamma (see
XI 818026), modified fragments of these chemokines and multimeric
proteins comprising an association of two chemokine proteins.

Spesis can occur in hospitalised patients, and a consequence of
bacterial sepsis is septic shock. The method of the invention
provides a treatment for sepsis, particularly septic shock, which
is a major cause of death in intensive care units. Septic shock
syndrome apparently has intractable resistance to the effects of
a variety of highly potent antimicrobial agents. Survival is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating myelosuppression or any condition involving userung immunosuppression or low levels of haematopoietic cells claim. I Page 21; 31pp; English.

This polypeptide sequence comprises human gro beta. Use of mammalian chemokines selected from gro alpha (W17670), gro beta, gro gamma (W17672) or KC (W17669) for mobilising haematopoietic cells is claimed. The chemokines, optionally used together with a growth factor or other haematopoietic regulator, are used to treat myelosuppression or any condition that involves immunosuppression or low levels of haematopoietic cells, e.g. infection, cancer, myelopoietic dysfunction, haematopoietic disorders, aplastic anaemia or autoimmune disease, or low production/differentiation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              King AG, Pelus LM;
WPI; 97-258957/23.
Use of specific chemokine(s) for stem cell mobilisation - useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Gro beta: Chemokine; intercrine; myelosuppression;
immunosuppression; haematopoietic cell; infection; cancer;
implastic anaemia; autoimmune disease; stem cell transplant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 77; DB 25; Length 73;
Pred. No. 5.07e-02;
1; Mismatches 0; Indels
                                                                                                 /note= "preferred modified fragment of KC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "preferred polypeptide (Claim 2)"
                         Location/Qualifiers 5..73
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                                                                                                                                 (Claim 2)"
                                                                                                                                                                                                                                                                          21-NOV-1995; US-007425.
(SMIK ) SMITHKLINE BEECHAM CORP.
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W17671 standard; Protein; 73 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 93.9%;
Best Local Similarity 91.7%;
Matches 11; Conservative
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24-0CT-1996; U17074.
24-0CT-1995; US-547262.
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20-NOV-1996; U18616.
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Homo sapiens.
                                                                                                                                                              WO9719173-A1
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                                                                Protein
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R23034;
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haematopoietic or bone marrow cells. A claimed application is in peripheral blood stem cell transplants in patients being treated by chemotherapy. Chamotherapy. The more more active, e.g. by 2 orders of mannal request of stem the full-length protein. When used with a colony stimulating factor (CSF), a synergistic effect is achieved and the dose, and side-effects, of CSF can be reduced. Compared with conventional methods of stem cell transplants, use of mammaolian chemothics provides a more rapid release of peripheral blood mononuclear cells and/or platelets, reducing risk of infection and allowing use of higher doses of chemotherapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Macrophage inflammatory protein; megakaryocytopoiesis; MIP-1; MIP-2; thrombocythemia; reactive thrombocytosis; stroke; emboli; platelet; myeloproliferative disorder.
                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human gro-beta chemokine,
Gro-alpha protein; chemokine; inflammation; antiinflammatory;
hematopoietic synergistic factor; HSF; hematopoietic precursor;
bone marrow; intercrine; desamino gro-beta; truncation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New truncated chemokine with increased biological activity - an related multimers, nucleic acid, antibodies etc., for treating inflammation, stimulating growth of bone marrow etc., also peptide(s) for inducing haematopoietic synergistic factor. Disclosure; Page 51-52; 89pp; English.

Truncated, desamino chemokine comprising amino acids 5-73 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human mature gro-beta (full sequence given in R66699)
shows enhanced biological activity when compared to the mature
protein, and has been used to prepare multimeric, modified
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/note= "desamino truncated gro-beta, claim 6,
                                                                                                                                                                                                                                                                                                  Score 77; DB 24; Length 73;
Pred. No. 5.07e-02;
1; Mismatches 0; Indels
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Pred. No. 5.07e-02;
I; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              King AG, Pelus LM;
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                                                                                                                                                                                                                                                                                                93.9%;
ilarity 91.7%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-SEP-1993 (first entry)
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Best Local Similarity 9
                                                                                                                                                                                                                                                                                                                                                                                      49 kaclnpaspmvk 60
                                                                                                                                                                                                                                                                                                                                                                                                                1 KACLNPASPIVK 12
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                                                                                                                                                                                                                                                                                                                     Local Similarity
les 11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-DEC-1994.
03-JUN-1994; U06264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 95-036402/05
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                                                                                                                                                                                                                                                      73 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
WO9309799-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Balcarek JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9429341-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemokines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MIP-2alpha.
                                                                                                                                                                                                                                                          Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R36771;
                                                                                                                                                                                                                                   agents.
                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
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                                                                                                                                     Suppression of megakaryocytopolesis - by administration of macrophage inflammatory protein-1 or -2 bisclosure; page 18: 26pp; English.

A claimed method for reducing the no. of circulating platelets in the bloodstream of a mammal comprises admin. of MIP-1 and/or MIP-2 or their analogues to induce such a reduction. The MIP-1, MIP-2 or analogue may be operatively linked to a carrier. The MIPs can be used to inhibit megakaryocytopolesis to effect in vivo reduction of platelet nos. They can be used to treat disorders with excessively high platelet counts such as thrombocytosis, stroke, pulmonary emboli sequence 73 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Screening for cods. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 12; Page 40; 60pp; English.

Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pvL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Macrophage inflammatory protein 2-alpha, gro-beta/MIP-2-alpha;
heparanase, heparin, heparan sulfate; arthritis; restenosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 77; DB 7; Length 73;
Pred. No. 5.07e-02;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human Gro beta cytokine.
Cytokine; inflammatory response; MAD-2; cancer diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 77; DB 13; I
Pred. No. 5.07e-02;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R70793 standard; Protein; 102 AA. R70793;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R23034 standard; Protein; 107 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 93.9%;
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hoogwerf AJ, Ledbetter SR; WPI; 95-082239/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 93.9%;
Best Local Similarity 91.7%;
Matches 11; Conservative
13-NOV-1992; U09671.
15-NOV-1991; US-792988.
(UYPE-) UNIV PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-AUG-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-OCT-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gro-beta/MIP-2-alpha.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49 kaclnpaspmvk 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KACLNPASPIVK 12
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                                                                                                                 WPI; 93-182239/22.
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                                                                                      Gewirtz AM;
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US-09-150-813-72.rag

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The cDNA clone coding for inflammatory cytokine Gro-beta was The cDNA clone coding for inflammatory cytokine Gro-beta was consolated from a mezerin and calcium ionophore-stimulated leukocyte cDNA library. The amino acid sequence of Gro beta was deduced from the nucleotide sequence. The level of Gro beta in inflammatory cresponse cells can be used as an indication of a test substance's inflammatory activity and to diagnose colon cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure: Fig 2: 68pp; English.

The sequence was deduced from the DNA sequence obtd. by screening the sequence was deduced from the DNA sequence was deduced from the DNA sequence was deduced from the U937 cDNA library prepd. from poly-A+ RNA from PNA treated and LNS stimulated cells, using as probe a fragment isolated from the mMIP-2 cDNA (see Q20728) encoding most of the mature mMIP-2 amino acid sequence. Two classes of human cDNA homolgous to mMIP-2 were found designated alpha and beta. The alpha form reproduced hare is claimed in W09200327; the beta form (Q20530) is claimed in W09200326. The alpha form is the more abundant of the two. The wound healing, to modulate myelopoiesis and to induce adjuvant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human macrophage inflammatory protein 2-alpha - useful in
treating infections, cancer, myelopoietic dysfunction and auto:
immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 77; DB 4; Length 107; Pred. No. 5.07e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73.3-MPR-1992 (first entry)
Human macrophage inflammatory protein (MIP) 2 alpha.
Inducible; secretory; inflammatory response; cytokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
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                                                        Location/Qualifiers
                                                                                              1..35
/label= leader
/note= "putative"
36..107
/label= Gro_beta
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R20529 standard; Protein; 107 AA.
R20529;
                                                                                                                                                                                                                                                                                                                                                                                                                          Haskill JS, Nitecki DE, Ralph P;
WPI; 92-150882/18.
N-PSDB; Q24266.
colonic epithelial tumour cell.
                                                                                                                                                                                                                                                                                                                                                                 (CETU ) CETUS CORP.
(UYNC-) UNIV OF NORTH CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..34
/label= signal
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Tekamp-01son P, Gallegos CA;
WPI: 92-041519/05.
N-PSDB: Q20729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 93.9%;
Best Local Similarity 91.7%;
Matches 11; Conservative
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24-JUN-1991; U04482.
22-JUN-1990; US-541897.
19-JUN-1991; US-715194.
                                                                                                                                                                                                                                                                                                     24-SEP-1991; U06936.
28-SEP-1990; US-590223.
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                                     Homo sapiens.
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                                                                                                                                                                                                                                            WO9206196-A
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                                                                                     peptide
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CC See also R20588,R20590 and R20528-30.

SQ Sequence 107 AA;

Query Match 93.9%; Score 77; DB 4; Length 107;

Best Local Similarity 91.7%; Pred. No. 5.07e-02;

Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

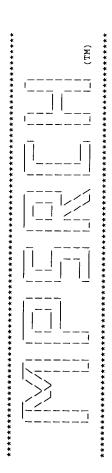
Db 83 kaclnpaspmvk 94

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QY 1 KACLNPASPIVK 12

Search completed: Fri Feb 4 18:02:06 2000

Job time: 20 secs.
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protein · protein database search, using Smith-Waterman algorithm MPsrch_pp

Fri Feb 4 18:09:28 2000; MasPar time 2.64 Seconds 128.473 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-73 (1-12) from US09150813.pep 86 Title: Description: Perfect Score: Sequence:

1 KACLNPASPMVK 12

PAM 150 Gap 15 Scoring table:

77977 seqs, 28268293 residues Searched:

Post-processing:

Minimum Match 0% Listing first 45 summaries

swiss-prot37 Database:

Mean 24.025; Variance 25.608; scale 0.938 1:swissprot Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Pred. No.	1 220-10	4 976-08	1.89e-07	2.61e-06	9.48e-06	9.48e-06	2.22e-04	7.58e-04	7.58e-04	7.58e-04	2.54e-03	8.34e-03	1.50e-02	1.50e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02			2.68e-02	2.68e-02
Description	MACROPHAGE TAREAMANDE		GROWTH REGULATED PROTE	REGULATED	GROWTH REGULATED PROTE	GROWTH REGULATED PROTE	GROWTH REGULATED PROTE	PERMEABILITY FACTOR 2	GROWTH REGULATED PROTE	GROWTH REGULATED PROTE	GROWTH REGULATED PROTE	MACROPHAGE INFLAMMATOR	PLATELET BASIC PROTEIN	PLATELET BASIC PROTEIN	GRANULOCYTE CHEMOTACTI	CYTOKINE LIX PRECURSOR	TUBULIN ALPHA CHAIN (F	TUBULIN ALPHA-1 CHAIN	TUBULIN ALPHA CHAIN.	TUBULIN ALPHA-4 CHAIN.	TUBULIN ALPHA-2 CHAIN.	TUBULIN ALPHA CHAIN.	TUBULIN ALPHA-6 CHAIN.
SUMMARIES	MT2A HIMAN	MIZB HUMAN	GRO HUMAN	GROG_BOVIN	GROB_BOVIN	GROA_BOVIN	GRO_CRIGR	GRO1_RABIT	GRO_RAT	GRO_CAVPO	GRO2_RABIT	MIP2_MOUSE	PF4L_PIG	PF4L_HUMAN	GCP2_BOVIN	LIX_RAT	TBA_LYTPI	TBA1_CHICK	TBA_ONCKE	TBA4_HUMAN	TBA2_DROME	TBA_XENLA	TBA6_MOUSE
DB	ļ -	-	Н	Н	Н	П	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	г	Н	Н	Н	Н	Н	П
% Query Match Length	107	107	107	86	104	104	101	7.1	96	104	104	100	119	128	75	130	161	412	444	448	449	449	449
% Query Match	100.0	91.9	89.5	84.9	82.6	82.6	76.7	74.4	74.4	74.4	72.1	8.69	68.6	68.6	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
Score	86	79	77	73	71	71	99	64	64	64	62	9	59	59	28	28	28	28	28	28	28	28	28
Result No.	Ε Ε	7	က	4	Ŋ	9	7	ω	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23

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2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	2.68e-02	4.75e-02	4.75e-02	4.75e-02	4.75e-02	4.75e-02	8.39e-02
IN ALPHA CHAIN.	LIN ALPHA CHAIN.	LIN ALPHA-1 CHAIN.	ALPHA-3	IN ALPHA-3 AND AL	IN ALPHA CHAIN, T	IN ALPHA-1 CHAIN	IN ALPHA CHAIN (A	IN ALPHA CHAIN.	IN ALPHA-1 CHAIN.	IN ALPHA-1 CHAIN.	IN ALPHA-1 CHAIN,	IN ALPHA-3 CHAIN	ALPHA-2	IN ALPHA-1 CHAIN.	IN ALPHA-2/ALPHA-	SROWTH REGULATED PROTE	IN ALPHA CHAIN (F	IN ALPHA-2 CHAIN	IN ALPHA CHAIN.	ONA-DIRECTED RNA POLYM	TUBULIN ALPHA-5 CHAIN.
TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	TUBULIN	GROWT	TUBULIN	TUBULIN	TUBULIN	DNA-D	TUBUL
TBA_BOMMO	TBA_NOTVI	TBA1_DROME	TBA3_DROME	TBA3_MOUSE	TBAT_ONCMY	TBA1_HOMAM	TBA_TORMA	TBA_PIG	TBA1_CRIGR	TBA1_MOUSE	TBA1_HUMAN	TBA3_HOMAM	TBA2_MOUSE	TBA1_PARLI	TBA2_PATVU	GRO_MOUSE	TBA_OCTVU	TBA2_HOMAM	TBA_OCTDO	RPOB_NEIME	TBA5_CHICK
	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	П	Н	٦	П	Н	-1	Н	7	
450	450	450	450	450	450	451	451	451	451	451	451	451	451	452	452	96	240	451	451	1389	448
67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	66.3	66.3	66.3	66.3	66.3	65.1
28	28	58	28	28	28	28	28	28	28	28	28	28	28	28	28	57	22	57	22	57	26
24	25	56	27	28	29	30	31	32	33	34	32	36	37	38	36	40	41	42	43	44	45

ALIGNMENTS

RESULT	1
ח ל	MIZALHUMAN SIANDAKD; PKT; 10/ AA. D19875.
2 5	/ DET.
i E	17. CASS
3 E	(REL. 1/, LAST
3 6	
3	MACKUPHAGE INFLAMMATORY PROTEIN-2-ALPHA PRECURSOR (MIP2-ALPHA) (GROWTH
DE	REGULATED PROTEIN BETA) (GRO-BETA).
GN	GRO2 OR GROB OR MIP2A.
SC	HOMO SAPTENS (HIMAN)
ح ا	VOTA METALON CHORDARY, VERBERGHAN MANAGETTA
3 5	DETENDED OF MEIGLOR, CHORDAIA, VERIEBERAIA, MAMMALIA, EUTHERIA, DETENDED OF THE TOWN THINKS TOWN
3	FRIMALES; CATARRHINI; HOMINIDAE; HOMO.
RN	[1]
RP	SEQUENCE FROM N.A.
RC	TISSUE=HISTIOCYTIC LYMPHOMA:
RX	
RA RA	THE VALUE OF CONTINUE OF MACHINER IN CHARLES IN
, c	., MCCDAIN U., Sherri
Ę E	FABRE M., VAN DEVENIER S., CERAMI A.;
X.	"Cloning and characterization of cDNAs for murine macrophage
RT	lammatory
RL	J. EXP. MED. 172:911-919(1990).
RN	
RP	SEQUENCE FROM N.A.
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Ç	GNOTENDONSI G.K.
H.	of from
RT	<pre>monocytes: expression in leukocytes and wound tissue.";</pre>
RL	MOL. CELL. BIOL. 10:5596-5599(1990).
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XX	MEDLINE: 91017578
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3 5	FACOL MAILS ACAD. SCI. 0.S.A. 8/1/32/1/36(1990).
، د	-:- FUNCTION: PRODUCED BY ACTIVATED MONOCYTES AND NEUTROPHILS AND
ပ္ပ	EXPRESSED AT SITES OF INFLAMMATION.
ပ္ပ	-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
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-!- FUNCTION: MAY PLAY A ROLE IN INFLAMMATION AND EXERT ITS EFFECTS
ON ENDOTHELIAL CELLS IN AN AUTOCRINE PASHION.
-!- SIMILARITY: BELOKICS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1991 (REL. 17, LAST SEQUENCE UPDATE)
01-JUN-1994 (REL. 29, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN-2-BETA PRECURSOR (MIP2-BETA) (GROWTH
                                                                                                                                                                                                                                                                                                                        Gaps
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MENTINE, ., PEMCE A., MORRIS J., SPORN S.A., ANISOWICZ A., LEE S.W. SMITH T., MARTIN G., RALPH P., SAGER R.;

"Identification of three related human GRO genes encoding cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TEKAMP-OLSON P., GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B., FABRE M., VAN DEVENTER S., CERAMI A.; "Cloning and characterization of cDNAs for murine macrophage inflammatcry protein 2 and its human homologues."; J. EXP. MED. 172:911-919(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                          MACROPHAGE INFLAMMATORY PROTEIN
                                                                                                                                                                                                                                                                                       Score 86; DB 1; Length 107;
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                                                                                                                                                            CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
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BY SIMILARITY.
6E431A15 CRC32;
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                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                           PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                          11389 MW;
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                            EMBL; X53799; G34659; -.
EMBL; M36820; G183629; -.
EMBL; M57731; G183627; -.
PIR; JH0281; JH0281.
MIM; 139110; -.
                                                                                                                                                                                                                                                                                        100.08;
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107 AA;
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01-JUN-1994
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MI2B_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RICHWOND A., BALENTIEN E., THOWAS H.G., FLAGGS G., BARTON D.E., SPIESS J., BORDONI R., FRANCKE U., DERYNCK R.; "Molecular characterization and chromosomal mapping of melanoma growth stimulatory activity, a growth factor structurally related to beta-thromboglobulin.";
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
GROWTH REGULATED POTEIN PECURSOR (MELANOVA GROWTH STIMULATORY
ACTIVITY) (MGSA) (NEUTROPHIL-ACTIVATING PROTEIN 3) (NAP-3).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                       MACROPHAGE INFLAMMATORY PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANISOWICZ A., BARDWELL L., SAGER R.; "Constitutive overexpression of a growth-regulated gene in transformed Chinese hamster and human cells."; PROC. NATL. ACAD. SCI. U.S.A. 84:7188-7192(1987).
                                                                                                                                                                                                                                                                                                                                                                      Length 107;
                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                   CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                  AA -> G (IN REF. 2).
6F2A63D2 CRC32;
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Pred. No. 4.97e-08;
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BY SIMILARITY.
MIM; 139111; -.. PROSITE; PSO0471; SMALL_CYTOKINES_CXC; 1. PFOM; PFO0048; 118; 1. HSSP; P09341; 1MGS.
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NUCLEIC ACIDS RES. 18:6453-6453(1990).
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                                                                                                                                                                                                       2-BETA.
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HOMO SAPIENS (HUMAN).
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les 11; Conservation
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27
107 AA;
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P09341;
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90.0%;
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         STANDARD;
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         GROG_BOVIN
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046677;
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                                                                                     WEN D., ROWLAND A., DERYNCK R.; "Expression and secretion of gro/MGSA by stimulated human endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              determined by 1H NMR spectroscopy.";
J. BIOL. CHEM. 269:32909-32915(1994).
-!- FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS. MAY PLAY A
ROLE IN INFLAMMATION AND EXERTS ITS EFFECTS ON ENDOTHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PFAM; PF00048; 118; 1. -
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
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                                                                                                                                                                                              MEDLINE; 93387459.
FAIRBROTHER W.J., REILLY D., COLBY T., HORUK R.;
"IH assignment and secondary structure determination of human melanoma growth stimulating activity (MGSA) by NMR spectroscopy.";
FEBS LETT. 330:302-306(1993).
                                                                                                                                                                                                                                                                                                         STRUCTURE BY NMR.

PAINDLINE; 94376594.

FAIRBROTHER W.J., REILLY D., COLBY T., HESSELGESSER J., HORUK R.;

"The solution structure of melanoma growth stimulating activity.";

J. MOL. BIOL. 242:252-270(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 95105175.
KIM K.S., CLARK-LEWIS I., SYKES B.D.;
"Solution structure of GRO/melanoma growth stimulatory activity
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Pred. No. 1.89e-07;
1; Mismatches 0; Indels
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human synovial cells and fibroblasts.";
BIOCHEM. J. 259:585-588(1989).
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91.7%;
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EMBL; X344489; G34626; --
PIR; S00983; S00983; PIR; S00983; PIR; S1369; S13669; PIR; S13669; S13669; PDB; IMGS; 30-SEP-94; PDB; IMGS; 31-MAR-95; MIM; 155730;
                                                                                                                                              EMBO J. 8:1761-1766(1989).
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                                                   POSSIBLE FUNCTION.
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                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
YOSHIMURA I., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-1-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
GROWTH REGULATED PROTEIN HOMOLOG GAMMA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
GROWTH REGULATED PROTEIN HOMOLOG BETA.
BY SIMILARITY.
                                                                                                                                                                                                                             BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOSINAE; BOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó
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                                                                                                          15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG GAMMA PRECURSOR (GRO-GAMMA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG BETA PRECURSOR (GRO-BETA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 73; DB 1; Length 98; Pred. No. 2.61e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; U95811; G2735493; -.
PROSITE; PSO0471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29 POTENTIAL.
98 GROWTH REGULATED
65 BY SIMILARITY.
81 BY SIMILARITY.
10393 MW; ECCC2B4C CRG32;
98 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHAIN
DISULFID
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                                                                                                                                                                                                                                                                                                                                                                  YOSHIMURA T., MODI W.S.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL.
GROWTH REGULATED PROTEIN HOMOLOG ALPHA.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                           Gaps
                                                                                                                                                                                                                                                                                                                         ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
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0
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; CRICETINAE; CRICETULUS.
                                                                                                                                                                                                                                                                                          BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                             GROWTH REGULATED PROTEIN HOMOLOG ALPHA PRECURSOR (GRO-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 88041072.
ANISOWICZ A., BARDWELL L., SAGER R.;
CONStitutious overexpression of a growth-regulated gene in transformed Chinese hamster and human cells.";
PROC. NATL. ACAD. SCI. U.S.A. 84:7188-7192(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 71; DB 1; Length 104; Pred. No. 9.48e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                           Score 71; DB 1; Length 104; Pred. No. 9.48e-06;
                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS00471; SWALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCFD567E CRC32;
            2C63B23D CRC32;
                                                                                                                                                                                                                             15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-WAR-1989 (REL. 10, CREATED)
01-WAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-DEC-1992 (REL. 24, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 AA.
                                                                                                                                                                                                 104 AA.
                                                                          2; Mismatches
BY SIMILARITY
                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GROWTH REGULATED PROTEIN PRECURSOR.
42 82 E
104 AA; 10950 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10984 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             // Match
Local Similarity 80.0%;
                                             Query Match 82.6%;
Best Local Similarity 80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U95812; G2735495; -.
                                                                                                                                                                                                                                                                                                                                                                                                                  C-X-C) (CHEMOKINE CXC)
                                                                           8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66
82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 CLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82 CLNPTAPMVK 91
                                                                                                       82 CLNPTAPMVK 91
                                                                                                                                      3 CLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31
40
42
                                                                                                                                                                                LT 6
GROA_BOVIN
046676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GRO_CRIGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
              SEQUENCE
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DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
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                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -:- SUBBUIT: HOMODIMER (PROBABLE).
-:- INDUCTION: GENERATED DURING AN INFLAMMATORY REACTION.
-:- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
               -!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-x-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOHNSON M.C., GOODMAN R.B. II, KAJIKAWA O., WONG V.A., MONGOVIN S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDINE 9738900.
MEDINE, 91378900.
MEDINE, 91378900.
MEDINE, 91378900.
MEDINE, 91378900.
MATERIELD M.D., PERKINS J.A., BEAUBIEN B.C., TOTIX N.F., WATERFIELD M.D., HSUAN J., WILLIAMS T.J.,
"Identification of a second neutrophil-chemoattractant cytokine generated during an inflammatory reaction in the rabbit peritoneal cavity in vivo. Purification, partial amino acid sequence and structural relationship to melanoma-growth-stimulatory activity."; BIOCHEM J. 258.493-497(1991).
FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUL-1993 (REL. 26, CREATED)
01-FEBE-196 (REL. 33, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
PERMEABILITY FACTOR 2 (RPF2) (FRAGMENT).
ORYCTOLAGUS CUNICULUS (RABEIT)
EUKANYOTA; METAZOA; CHORDATA; VERTEBRATA; MANMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MARTIN I.R.; "Compose and their expression in "Cloning of two rabbit GRO homologues and their expression in alveolar macrophages."; GENE 151:337-338(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 66; DB 1; Length 101; Pred. No. 2.22e-04; 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                     CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
-! - FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN-NEW ZEALAND WHITE; TISSUE-ALVEOLAR MACROPHAGE;
                                                                                                                                                                                                                                                                                                                                                                           37 63 BY SIMILARITY.
39 79 BY SIMILARITY.
101 AA; 10893 MW; 3F83AD41 CRC32;
                                                                                                                                                                                                                                                              PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1. PFAM; PF00048; il8; 1. HSSP; P10889; IMI2.
                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
GRO PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         76.7%;
80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Conservative
                                                                                                                                                                                                                          EMBL; J03560; G304509; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                           28
101
                                                                                                                                                                                                                                            PIR; B28414; B28414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 ACLNPASPMV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78 ACLNPEAPMV 87
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 1-36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GRO1_RABIT
P30782:
                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KONISHIK., TAMBAKAY., YAMAMOTO M., YOMOGIDA K., WATANABE K.,
TSURUFUJI S., FUJIOKA M.;
"Structure of the gene encoding rat neutrophil chemo-attractant Gro.";
GENE 126:285-286(1993).
                                                                                                                                                                                                                                                                                                                                                                                         GRO_RAT STANDARD; PRT; 96 AA.
P14095;
01-JAN-1990 (REL. 13, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN PRECURSOR (CYTOKINE-INDUCED NEUTROPHIL CHEMOATTRACTANT) (CINC-1) (PLATELET-DERIVED GROWTH FACTOR-INDUCIBLE
                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HUANG S., PAULAUSKIS J., KOBZIK L.;
"Rat KC cDNA cloning and mRNA expression in lung macrophages and
fibroblasts.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WATANABE K., KONISHI K., FUJIOKA M., KINOSHITA S., NAKAGAWA H.; "The neutrophil chemoattractant produced by the rat kidney epithelioid cell line NRK-52E is a protein related to the KC/gro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HUANG S., PAULAUSKIS J.D., GODLESKI J.J., KOBZIK L.;
Expression of macrophage inflammatory protein-2 and KC mRNA in
                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                             Score 64; DB 1; Length 71;
Pred. No. 7.58e-04;
1; Mismatches 1; Indels
                                                                                                                                                                                       N -> S (IN REF. 2).
N -> S (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIOCHEM. BIOPHYS. RES. COMMUN. 184:922-929(1992)
                                                                                                                                          CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE.
DISULFID 7 33 BY SIMILARITY.
DISULFID 9 49 BY SIMILARITY.
                                                                                 PIR; S17507; S17507.
PROSITE: PS00411; SNALL_CYTOKINES_CXC; PARTIAL.
PFAM; PF00048; 118; 1.
PFSP; P09341; 1MSH.
                                                                                                                                                                                                                                  C1371890 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOL. CHEM. 264:19559-19563(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pulmonary inflammation.";
AM. J. PATHOL. 141:981-988(1992).
                                                                                                                                                                                                                                  7713 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 36-88 FROM N.A.
                                                                                                                                                                                                                                                             74.48;
                                                                                                                                                                                                                                                                                           9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-CD-1; TISSUE-LUNG;
MEDLINE; 93035653.
HUANG S., PAULAUSKIS J.D.
                                                                       EMBL; L19157; G309960; -.
                                                                                                                                                               20
23
23
13
                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                       48 ACRNPAAPMVK 58
                                                                                                                                                                                                                                                                                                                                                2 ACLNPASPMVK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 25-96.
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                                                                                                                                                                                                                                71 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 93246259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 92246987
                                                                                                                                                                                       20
23
71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROTEIN KC)
                                                                                                                                                                                                                  NON_TER
SEQUENCE
                                                                                                                                                                                      CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 98162936.
HANZAMA H., HARDYAMA H., KONISHI K., WATANABE K., TSURUFUJI S.;
HANZAMA H., HARDYAMA H., KONISHI K., WATANABE K., TSURUFUJI S.;
"Solution structure of CINC/Gro investigated by heteronuclear NMR.";
J. BIOCHEM. 123:62-70(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEUTROPHIL ACTIVATION DURING INFLAMMATION.
--- SUBDNIT: MONOMER AND HOMODIMER.
--- TISSUE SPECIFICITY: AT LEAST EXPRESSED IN THE LUNG AND TRACHEA.
--- INDUCTION: IN LUNG, BY LIPOPOLYSACCHARIDE OR INFLAMMATION.
--- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                             SINCULINE; 5046335.

HENZAWA H., HARUYAMA H., WATANABE K., TSURUFUJI S.;

HANZAWA H., HARUYAMA H., WATANABE K., TSURUFUJI S.;

"The three dimensional structure of rat cytokine CINC/Gro in solution
"The three dimensional structure of rat cytokine CINC/Gro in solution
                                      novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                            MEDLINE; 97335927.
WHATAMA H., HARUYAMA H., KONISHI K., WATANABE K., ISURUFUJI S.; "Subunit association and monomer structure of CINC/Gro revealed by 1H-NMR.";
                                    a
by
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              NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, amenber of rat GRO/CINCs, is a predominant chemokine produced lipopolysaccharide-stimulated rat macrophages in culture.";
BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GROWTH REGULATED PROTEIN.
BY SIMILARITY.
BY SIMILARITY.
E49Bla5A CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CT 10
GRO_CAVPO STANDARD; PRT; 104 AA.
GRO_CAVPO STANDARD; 15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; A34481; A34481.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                 BIOCHEM. 121:835-841(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10249 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74.48;
70.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; D11445; G220755; -. EMBL; D11444; G220753; -. EMBL; M86536; G206687; -. EMBL; S45856; E62498; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PFAM; PF00048; 118; 1.
HSSP; P09341; 1MSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 ACLDPEAPMV 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 ACLNPASPMV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96 AA;
MEDLINE; 96183056
                                                                                                                    STRUCTURE BY NMR
                                                                                                                                                                                                                                            STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                    STRUCTURE BY NMR.
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35
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3; Mismatches
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                                    SMALL_CYTOKINES_CXC; 1.
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  or send an email to license@isb-sib.ch).
                                                                                     PROBABLE.
                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                         Pred.
                                                                                                                       42 82 F
104 AA; 10900 MW;
                                                                                                                                                            72.1%;
                                                                                                                                                                      Local Similarity 70.0%;
                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X53798; G53129; -.
                                                                                               104
66
                        EMBL; U12310; G520743;
                                               PFAM; PF00048; 118; 1.
HSSP; P09341; 1MGS.
                                                                                                                                                                                                                                                                                                                                                                MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PIR; JH0200; JH0200.
PDB; IMI2; 29-APR-98.
MGD; MGI:96991; MIP2.
                                                                                                                                                                                                          82 CLNPTAPVVK 91
                                                                                                                                                                                                                         3 CLNPASPMVK 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 28-59.
                                    PS00471;
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P10889;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein 2
                                                                                                            DISULFID
                                                                                                                                  SEQUENCE
                                                                                                                        DISULFID
                                                                                                                                                            Query Match
                                    PROSITE;
                                                                                     SIGNAL
                                                                                                                                                                                   Matches
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                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its mose by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
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                                                                                                                  -!- FUNCTION: PLAYS A ROLE IN MONOCYTE ADHESION TO THE ENDOTHELIUM.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTORINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCHWARTZ D., CHAVERRI-ALAMADA L., BERLINER J., KIRCHGESSNER T., QUISOMORO D., FANG J., TEKAMP-OLSON P., LUSIS J., FOGELMAN A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GROWTH REGILATED PROTEIN HOMOLOG PRECURSOR (GRO HOMOLOG).
ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 64; DB 1; Length 104; Pred. No. 7.58e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                    EMBL; AF052004; G2981063; -
EMBL; AF052005; G2981065; -
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                YOSHIMURA T., MODI W.S.;
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                       859F2A19 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
01-FEB-1996 (REL. 33, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
GRO PROTEIN.
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          CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                       104 AA; 11069 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              74.48;
70.08;
                                                                                                                                                                                             C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                 EMBL; U95809; G2735489; -. EMBL; U95810; G2735491; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81 ACLDPEAPMV 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 ACLNPASPMV 11
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                                                                        STRAIN-STRAIN 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GRO2_RABIT
P47854;
                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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WOLPE S.D., SHERRY B., JUERS D., DAVATELIS G., YURT R.W., CERAMI A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 98285558.
SHAO W., JENYA L.F., WEST J., LOLIS E., SCHWEITZER B.I.;
SHAO W., JENYA L.F., WEST J., LOLIS E., SCHWEITZER B.I.;
"SOJULION STRUCTURE of MILLINE MACROPHAGE Inflammatory protein-2.";
BIOCHEMISTRY 37:8303-8313(1998).
-!- FUNCTION: CHEMOTACTIC FOR HUMAN POLYMORPHONUCLEAR LEUKOCYTES BUT
DOES NOT INDUCE CHEMORINESIS OR AN OXIDATIVE BURST.
                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                            GROWTH REGULATED PROTEIN HOMOLOG. BY SIMILARITY.
BY SIMILARITY.
C75ABE07 CR32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 90354792.

TERRAMP-OLSON P., GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B., FABER M., VAN DEVENTER S., CERAMI A.;

"Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues.";

J. EXP. MED. 172:911-919(1990).
                                                                                                                                                                                                                                                                                                                                                                            .;
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                           Score 62; DB 1; Length 104;
                                                                                                                                                                                                                                                                                                                                                                   0; Indels
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-1989 (REL. 11, CREATED)
01-JUL-1988 (REL. 35, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2 PRECURSOR (MIP2).
                                                                                                                                                                                                                                                                                                                             No. 2.54e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROC. NATL. ACAD. SCI. U.S.A. 86:612-616(1989)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                          Gaps
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          INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                   MACROPHAGE INFLAMMATORY PROTEIN 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; GROWTH FACTOR; CHEMOTAXIS; MITOGEN; PLATELET; SIGNAL.
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                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAŽOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 59; DB 1; Length 119; Pred. No. 1.50e-02;
                                                                                           Length 100;
                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLATELET BASIC PROTEIN
                                                                                          Score 60; DB 1; Louis Pred. No. 8.34e-03;
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6D7F3E47 CRC32;
                                                         78
10621 MW; 333AC6A4 CRC32;
                                                                                                                                                                                                                                01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
PLATELET BASIC PROTEIN PRECURSOR (PBP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128 AA.
                                                                                                                 3; Mismatches
                                                                                                                                                                                                              119 AA
                                                                                                                                                                                                                                                                                                                    ARTIODACTYLA; SUIFORMES; SUINA; SUIDAE; SUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Mismatches
                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND SEQUENCE OF 40-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
HSSP; P02775; INAP.
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                                                                                                                                                                                                             PRT;
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                                                                                         69.8%;
larity 54.5%;
Conservative
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                                100
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119
80
PFAM; PF00048; il8; 1.
            CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94 KICLDPEAPRIK 105
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                                28
36
38
100 AA;
                                                                                                                                        76 KVCLDPEAPLV 86
                                                                                                                                                              1 KACLNPASPMV 11
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54
56
119 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 94229068
                                                                                                                                                                                                                                                                                             SCROFA (PIG).
                                                                                                                                                                                                                                                                                                                                                      IISSUE-PLATELET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PF4L_HUMAN
P02775;
                                                                                                                                                                                               T 13
PF4L_PIG
P43030;
                                                        DISULFID
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                                             DISULFID
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WALZ A., BAGGIOLINI M.;
"A novel cleavage product of beta-thromboglobulin formed in cultures of stimulated mononuclear cells activates human neutrophils.";
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21-JUL-1986 (REL. 01, CREATED)
01-NOV-1991 (REL. 20, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANOTATION UPDATE)
15-DEC-1998 (REL. 37, LAST ANOTATION UPDATE)
16-DEC-1998 (REL. 37, LAST ANOTATION UPDATE)
17-DEC-1998 (REL. 31, LAST ANOTATION UPDATE)
18-DEATELET BASIC PROTEIN PRECURSOR (PBP) [CONTAINS: CONNECTIVE-TISSUE
ACTIVATING PEPTIDE III (CTAP-III); LOW-AFFINITY PLATELET FACTOR IV
(LA-PRA); BEPTIDE 2 (NAP-2)].
18-DEPTIDE 2 (NAP-2)].
19-DEPTIDE 3 (NAP-2)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Characterization of human platelet basic protein, a precursor form of low-affinity platelet factor 4 and beta-thromboglobulin."; BIOCHEMISTRY 25:1988-1996(1986).
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                                                                                                                                                                                                                                                                                                                BIOL. CHEM. 266:5785-5789(1991).
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                                                                                                                                                 (HUMAN)
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MEDLINE; 78187279.
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MEDLINE; 90155110.
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MALKOWSKI M.G., WU J.Y., LAZAR J.B., JOHNSON P.H., EDWARDS B.F.P.;

MALKOWSKI M.G., WU J.Y., LAZAR J.B., JOHNSON P.H., EDWARDS B.F.P.;

"The crystal structure of recombinant human neutrophil-activating
peptide-2 (MGL) at 1.9-A resolution.";

U. BIOL. CHEM. 270:7077-7087(1995).

INTRACELLULAR CAMP ACCUMULATES DNA SYNTHESIS, MITOSIS, GIYCOLYSIS,

INTRACELLULAR CAMP ACCUMULATED ND SUFFATED GIYCOSAMINOGING.

ALSO STIMULATES THE FORMATION AND SECRETION OF PLASMINOGEN

C ACTIVATOR BY HUMN SYNOVIAL CELLS. NAP-2 IS A POTENT

CHEMOATTRACTANT AND ACTIVATOR FOR NEUTROPHILS.

C SUBUNIT: BETA-THROMBOGLOBULIN IS AN HOMOTETRAMER.

C SUBUNIT: BETA-THROMBOGLOBULIN IS AN HOMOTETRAMER.

C SUBUNIT: PLATELET FACTOR IV (LA-PP4).

SPEPTIDE CONNECTIVE-ITSSUE ACTIVATING PEPTIDE III (CTAP III) (LOW-AFFINITY PLATELET FACTOR IV (LA-PP4).

SPEPTIDE BETA-THROMBOGLOBULIN, MILCH IS RELEASED FROM PLATELET'S

ALONG WITH PLATELET FACTOR IV AND PLATELET-DERIVED GROWTH FACTOR.

SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE CTA-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                               KUNGL A.J., MACHIUS M., HUBER R., SCHWER C., LAM C., ASCHAUER H., ELN G., LINDLEY I.J.D., ANDER M., "Purification, crystallation and preliminary X-ray diffraction analysis of recombinant human neutrophil-activating peptide 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PFAM; PF00048; i18; 1. CYTOKINE; CHEMOTAXIS; MITOGEN; CATOKINE; CONNECTIVE TISSUE; GROWTH FACTOR; CHEMOTAXIS; MITOGEN;
                               "Chemical synthesis, purification, and characterization of two inflammatory proteins, neutrophil activating peptide 1 (interleukin-8) and neutrophil activating peptide.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
CLARK-LEWIS I., MOSE B., WALZ A., BAGGIOLINI M., SCOTT G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PLATELET BASIC PROTEIN (PBP)
LA-PF4 / CTAP-III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 59; DB 1; Length 128; Pred. No. 1.50e-02; 3; Mismatches 3; Indels
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NAP-2.
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13894 MW; 15B7D1DF CRC32;
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PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                         BIOCHEMISTRY 30:3128-3135(1991).
[10]
                                                                                                                              X-RAY CRYSTALLOGRAPHY OF 59-128.
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                                                                                                                                                                                                                                                           FEBS LETT. 347:300-303(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PDB; 1NAP; 19-DEC-95.
PDB; 1TVX; 11-JAN-97.
SWISS-2DPAGE; P02775; HUMAN.
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Similarity 50.0%;
6; Conservative
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PIR; A24448; A24448.
PIR; A37382; A37382.
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128 AA;
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SEQUENCE
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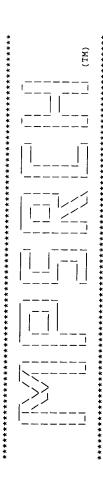
103 KICLDPDAPRIK 114

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PROOST P., WUTTS A., CONINGS R., LENAERTS J.-P., BILLIAU A.,
OPDENAKKER G., VAN DAMME J.;
'Human and bovine granulocyte chemotactic protein-2: complete amino
acid sequence and functional characterization as chemokines.";
BIOCHEMISTRY 32:10170-10177(1993).
-I-FUNCTION: CHEMOTACTIC FOR NEUTROPHIL GRANULOCYTES.
-I-SUBCELLULAR LOCATION: SECRETED.
-I-SUMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
PRAS; BF4188; BS4188.
PROSITE: PS00471; SMALL_CYTOKINES_CXC; 1.
PRAM; PF00048; 118; 1.
HSSP: PO2775; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                               MISSING (N-TERMINAL PROCESSING VARLANT).
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                                                                                                                       BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOYOIDEA; BOVIDAE; BOSINAE; BOS
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                                         01-FEB-1994 (REL. 28, CREATED)
01-FEB-1994 (REL. 28, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
SCYBE OR GCP2.
                75 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Mismatches
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                PRT;
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                STANDARD;
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LT 15
GCP2_BOVIN
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SEQUENCE.
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Fri Feb 4 18:08:36 2000; MasPar time 3.62 Seconds 132.864 Million cell updates/sec Run on:

not generated. Tabular output >US-09-150-813-73 (1-12) from US09150813.pep 86 Title:

1 KACLNPASPMVK 12 Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

122810 seqs, 40068593 residues Searched:

Post-processing:

Minimum Match 0% Listing first 45 summaries

pir60 Database:

1:pirl 2:pir2 3:pir3 4:pir4

Mean 23.220; Variance 28.384; scale 0.818 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		dР			SUMMARIES		
Result		Query					
No.	Score	Match	Length	DB	ID	Description	Pred. No.
1	98	100.0	107	7	JH0281	macrophage inflammato	1.276-08
7	79	91.9	107	7	B38290	GRO-damma precursor -	8.696-07
æ	77	89.5	107	~	A28414	melanoma growth-stimu	•
4	99	76.7	101	7	B28414	growth-regulated prot	i –
Ŋ	64	74.4		7	I64831		4
9	64	74.4	96	~	JN0572	0	4.586-03
7	9	8.69	100	N	JH0200	macrophage inflammato	3.91e-02
80	59	9.89	119	7	S42881		6.60e-02
6	59	9.89	128	H	TGHU	beta-thromboglobulin	6.60e-02
10	58	67.4	75	~	B54188	grapulocyte chemotact	1.110-01
11		67.4		~	UBURAL	tubulin alpha chain -	1.116-01
12	28	67.4		~	A61275	tubulin alpha-2 chain	i
13	58	67.4	387	~	S33517	tubulin alpha chain -	
14	58	67.4	411	Н	UBCHA	tubulin alpha chain -	,
15	58	67.4	444	7	A56635	tubulin alpha chain,	1.116
16	58	67.4	444	7	S25004		
17	58	67.4	448	~	177427	tubulin alpha chain i	
18	58	67.4	448	7	A25873		1.116
19	28	67.4	449	~	S00253		1.116
20	28	67.4		7	B26488	tubulin alpha-2 chain	Ή.
21	28	67.4	449	~	177428	tubulin alpha chain i	1.11e
22	28	67.4	450	7	543138	tubulin alpha chain -	1.116
23	28	67.4	450	7	177426	_	1.11e-01

A60407 Sporn, S.A.; Eierman, D.F.; Johnson, C.E.; Morris, J.; Martin, G.; Ladoner, M.; Haskill, S. J. Immunol. (1990) 144:4434-4441 Monocyte adherence results in selective induction of novel

#journal #title #authors REFERENCE

##molecule_type_mRNA ##residues 1-107 ##label HAS ##cross-references GB:M36820; NID:9183628; PID:9183629

24 25 26 26 27 28 29 39 31 31 31 32 33 34 44 44 44 44 45 44 45 44 44 45 46 41 41 41 44 45 46 41 41 41 41 41 41 41 41 41 41 41 41 41	58 58 58 58 58 58 58 58 58 58 58 58 58 5	677 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.4 450 2 .4 450 2 .4 450 2 .4 451 2 .4 451 1 .4 451 1 .4 451 1 .4 451 2 .4 452 2 .4 451	20202020202020202020202020202020202020	2 . A56622 2 . A56488 2 . C24903 1 . 2 . C24903 1 . 2 . C24903 1 . 1 . UBPGA 1 . 2 . A4843 1 . 2 . A23035 1 . 2 . A23035 1 . 2 . A23035 1 . 2 . A23035 1 . 2 . B24903 2 . 2 . S11207 2 . S58444 2 . S58444 2 . S58444 2 . S7325 4 . 2 . S58444 5 . 2 . S43254 6 . 2 . S1207 8 . Inflammato application app	122 188 188 188 193 193 193 193 194 194 195 195 195 195 195 195 195 195	unbul un	in alpha protein alpha procyte additional in alpha in alp	pha chain, pha chain, pha dail pha dail pha dain pha dain pha chain pha chai	1.11e-01 1.1e-01 1.e-01 1.
#title #COOSS #COCOSS ##m ### REFERENCE #autho #journ #journ #title	refer sion olecul esidue ross-r rs	fe the property of the propert	loning and seque human monocytee es MUID:9037725 35931 YPE mRNA 1-107 ##lab rences GB:M5773 38290 askill, S.; Pea A.; Lee, S.W.; roc. Natl. Acad dentification o cytokine funct.	id seque bnocytes 0377259 3.77259 3.77335 5.7 Peac 5.7 Peac 5.7 Acad tion of	Birt garage	xpr xpr A.; tth,	ew g in NID S, J arti (19	Kocytes Kocytes 83626; I Sporn, 6 G.; Rall 87:7733	s and wouns and wountlebell state of the sta	To transcript from activated leukocytes and wound tissue. 19183626; PID:9183627 2 Sporn, S.A.; Anisowicz, n, 6; Ralph, P.; Sager, R. 90) 87:7732-7736 uman GRO genes encoding
acc #	ssion	A38290	0 mRNA		,					

Sat Feb

#length 107 #molecular-weight 11342 #checksum 2559

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SUMMARY
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#title (GCP-2) from human tumor cells. In vitro and in vivo comparison with natural forms of GRO, IP-10, and IL-8. #accession C46519
                                                                                                                                                                                                                                             #domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 2 alpha #status
predicted #label MAT
#length 107 #molecular-weight 11389 #checksum 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #authors Haskill, S.; Peace, A.; Morris, J.; Sporn, S.A.; Anisowicz, A.; Lee, S.W.; Smith, T.; Martin, G.; Ralph, P.; Sager, R. #journal Proc. Natl. Acad. Sci. U.S.A. (1990) 87:7732-7736 #title Identification of three related human GRO genes encoding cytokine functions.
#cross-references MUID:91017578
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #authors Texany-Olson, P.; Gallegos, C.; Bauer, D.; McClain, J.;
Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.
#journal J. Exp. Med. (1990) 172:911-919
#title Cloning and characterization of cDNAs for murine macrophage
#cross-references MUID:90354792
#cross-references MUID:90354792
#mailton JH0282
#mailton JH0282
genes sharing homology with mediators of inflammation and
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#product GRO-gamma #status experimental #label MAT
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31-May-1991 #sequence_revision 27-Oct-1995 #text_change
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growth-regulated protein gamma; macrophage inflammatory
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##molecule_type mRNA
##residues 1.66',g',29-107 ##label HAS
##cross-references GB:M36821; NID:g183632; PID:g183633
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##residues 1-107 ##label TEK
##cross-references GB:X53800; NID:g34662; PID:g34663
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##residues 35-52 ##label PRO
##experimental_source MG-63 osteosarcoma cells
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Pred. No. 1.27e-08;
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                            tissue repair. #cross-references MUID:90257367
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Best Local Similarity 100.0%;
Matches 12; Conservative
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##residues 56-10
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#authors Schroeder, J.M.; Sticherling, M.; Henneicke, H.H.; Preissner, W.C.; Christophers, E.
#journal J. Immunol. (1990) 144:223-2232
#title IL-lalpha or tumor necrosis factor-alpha stimulate release of three NAP-1/IL-8-related neutrophil chemotactic proteins in human dermal fibroblasts.
#cross-references WUID:90187866
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Biochem. J. (1989) 259:585-588
Inflammatorry cytokines induce synthesis and secretion of gro
protein and a neutrophil chemotactic factor but not
beta-2--microglobulin in human synovial cells and
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#title Nucleotide sequence of the human melanoma growth stimulatory activity (MGSA) gene.
#cross-references MUID:91057157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #title Molecular characterization and chromosomal mapping of
    melanoma growth stimulatory activity, a growth factor
    structurally related to beta-thromboglobulin.
#cross-references MUID:88328991
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30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change
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  Length 107;
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##residues 1-107 ##label ANI
##cross-references GB:J03561; NID:9183622; PID:9306806
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##residues 35-42,'x',44,'x',46-48 ##label SCH
##experimental_source dermal fibroblasts
ENCE $03975
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Query Match 91.9%; Score 79; DB 2; L. Best Local Similarity 100.0%; Pred. No. 8.69e-07;
                                                     0; Mismatches
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EMBO J. (1988) 7:2025-2033
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Billiau, A.; Van Damme, J.
#journal J. Immunol. (1993) 150:1000-1010
Identification of a novel granulocyte chemotactic protein (GCP-2) from human tumor cells. In vitro and in vivo comparison with natural forms of GRO, IP-10, and IL-8.
#cross-references_WUID:93139489
                                                                                                               Schroeder, J.M.; Persoon, N.L.M.; Christophers, E. J. Exp. Med. (1990) 171:1091-11100 Lipopolysaccharide-stimulated human monocytes secrete, apart from neutrophil-activating peptide l/interleukin 8, a second neutrophil-activating protein. NH-2-terminal amino acid sequence identity with melanoma growth stimulatory activity.
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formal_name Cricetulus griseus #common_name Chinese hamster
30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change
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#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84:7188-7192
#title Constitutive overexpression of a growth-regulated transformed Chinese hamster and human cells.
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##residues 35-63,'X',65 ##label SC2
##experimental_source LPS-stimulated monocytes
ENCE A46519
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##experimental_source MG-63 osteosarcoma cells
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#journal Am. J. Pathol. (1992) 141:981-988
#title Expression of macrophage inflammatory protein-2 and KC mRNA
in pulmonary inflammation.
#cross-references MUID:93035653
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Biochem. Biophys. Res. Commun. (1992) 184:922-929
Rat KC cDNA cloning and mRNA expression in lung macrophages
and fibroblasts.
                                                          Gaps
                                                                                                                                                                                                                                                                                        gene KC protein - rat (fragment)
#formal_name Rattus sp. #common_name rat
02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change
23-Feb-1997
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30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
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  Score 66; DB 2; Length 101;
Pred. No. 1.53e-03;
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#length 53 #checksum 8839
                                                        1; Mismatches
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##cross-references GB:M86536
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##cross-references GB:S45856; NID:9257055
                                                                                                                                                                                                                                                                    #type fragment
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##molecule_type DNA
##molecule_type DNA
1-96 ##label KON
1-06 ##label KON
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76.7%;
Larity 80.0%;
Conservative
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Best Local Similarity 70.0%;
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##residues 1-32,
Query Match
Best Local Similarity
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##residues
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experimental #label CYT
3th 96 #molecular-weight 10249 #checksum 5749
               the authors translated the codon AGT for residue 33 as Cys, AAC for residue 46 as Gln
                                                                                                   Nakagawa, H.
J. Biol. Chem. (1989) 264:19559-19563
The neutrophil chemcattractant produced by the rat kidney
epithelioid cell line NRK-52E is a protein related to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ij
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#molecule_type protein
##residues 25-57 ##label NA2
##experimental_source kidney, NRK-49F fibroblasts
##note sequence extracted from NCBI backbone (NCBIP:129131)
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##residues 25-57 ##label NAK
##experimental_source kidney, NRK-49F fibroblasts
##experimental_source extracted from NCBI backbone (NCBIP:129132)
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#journal FEBS Lett. (1994) 354.207-212
#title The three dimensional structure of rat cytokine CINC/Gro
solution by homonuclear 3D NMR.
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                                                                                Watanabe, K.; Konishi, K.; Fujioka, M.; Kinoshita, S.;
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Pred. No. 4.58e-03;
2; Mismatches 1; Indels
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#superfamily beta-thromboglobulin
  ##experimental_source alveolar macrophage
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##residues 25-96 ##label WAT
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Best Local Similarity 70.0%;
Matches 7; Conservative
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##molecule_type protein
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#formal_name Sus scrofa domestica #common_name domestic pig
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
#authors Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; McClain, J.; Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.
#journal J. Exp. Med. (1990) 172:911-919
#title Cloning and characterization of CDNAs for murine macrophage inflammatory protein 2 and its human homologues.
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#product macrophage inflammatory protein 2 #status
experimental #label MAT
#length 100 #molecular-weight 10621 #checksum 8720
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                                                                                                                                                                                                                                                                                Wolpe, S.D.; Sherry, B.; Juers, D.; Davatelis, G.; Yurt, R.W.; Cerami, A. Proc. Natl. Acad. Sci. U.S.A. (1989) 86:612-616 Identification and characterization of macrophage inflammatory protein 2.
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#cross-references WIID:94229068
#accession S43460
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beta-thromboglobulin precursor - human
connective-tissue activating peptide III; CTAP-III;
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FICATION #superfamily beta-thromboglobulin
x #length 119 #molecular-weight 12615 #checksum
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##cross-references GB:X53798; NID:g53128; PID:g53129
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Eur. J. Biochem. (1994) 221:713-719
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#accession A32190
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Best Local Similarity 54.5%;
Matches 6; Conservative
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##residues 1-10
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#title Characterization of human platelet basic protein, a precursor form of low-affinity platelet factor 4 and beta-thromboglobulin.
#cross-references MUID:86216117
                                                                                                                                                                                                                                                                                                                                                                                  ##cross-references GB:M54995; NID:9181175; PID:9181176 ##note the authors translated the codon GAT for residue 109 as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wenger, R.H.; Wicki, A.N.; Walz, A.; Kieffer, N.; Clemetson,
histamine-releasing factor; neutrophil-activating peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Walz, A.; Baggiolini, M. G. 1900) 171:449-454 Generation of the neutrophil-activating peptide NAP-2 from platelet basic protein or connective tissue-activating peptide III through monocyte proteases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #authors Begg, G.S.; Pepper, D.S.; Chesterman, C.N.; Morgan, F.J.
#fournal Biochemistry (1978) 17:1739-1744
#fille Complete covalent structure of human beta-thromboglobulin.
#cross-references MIID:78187279
#accession A90411
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                                                                                                                                                                                         Majumdar, S.; Gonder, D.; Koutsis, B.; Poncz, M.
J. Biol. Chem. (1991) 266:5785-5789
Characterization of the human beta-thromboglobulin gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #fitle Cloning of cDNA coding for connective tissue activating peptide III from a human platelet-derived lambdagtII expression library.
#cross-references MUID:89229374
                         #formal_name Homo sapiens #common_name man
30-Apr-1979 #sequence_revision 31-Dec-1992 #text_change
26-Feb-1999
                                                                                                                     A93982; A90411; A60709;
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##molecule_type mRNA
##residues
##cross-references GB:M54995; NID:g181175; PID:g181176; GB:M38441
                                                                                                                                                                                                                                                       Comparison with the gene for platelet factor 4. #cross-references MUID:91170256
                                                                                                                A39546; A37382; A24448; PL0222; A93982; A90411; A61240; B61240; A03240; A30159; A3516; S46247
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##molecule_type protein
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                      2; platelet basic protein
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##residues 48-128 ##label BEG
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##residues 54-67 ##label WAL
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#accession PL0222
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##molecule_type DNA
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There appears to be a second beta-thromboglobulin-like human gene.

There appears to be a second beta-thromboglobulin-like human gene.

Connective-tissue activating peptides (CTAP) are a group of proteins capable of activating connective tissue cells. CTAP-I.

-III. and -PRN are of I ymphoid, tumor cell, human platelet, and polymorphonuclear leukocyte origin, respectively.

CTAP-III, a monomer isolated from platelets, stimulates DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by human synovial cells.

Proteolytic removal of the first four residues of CTAP-III produces the active peptide beta-thromboglobulin, which is released from platelets along with platelet factor 4 and platelet-derived
#journal J. Clin. Invest. (1990) 85:1516-1521
#title Relationship of one form of human histamine-releasing factor to connective tissue activating peptide-III.
#cross-references_MUID:90237229
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#title Purification, crystallization and preliminary X-ray diffraction analysis of recombinant human neutrophil-activating peptide 2 (rhNAP-2).
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                                                                                                                                                                                                                                                                     #authors Kaplan, A.P.; Baeza, M.; Reddigari, S.; Kuna, P. int. Arch. Allergy Appl. Immunol. (1991) 94:148-153 #title Histamine-releasing factors. #cross-references MUID:92040226 #accession A61240
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granulocyte chemotactic protein, GCP-2 - bovine
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Pred. No. 6.60e-02;
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#disulfide_bonds #status experimental
#length 128 #molecular-weight 13894 #che
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growth factor; homotetramer; platelet
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##residues 44-62,'X',64-79 ##label BAE
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##rosidues 59-62,'X',64-79 ##label KA2
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##molecule_type protein
""---:Albe 44-61,'XX',64 ##label KAP
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Best Local Similarity 50.0%;
Matches 6; Conservative
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#journal J. Mol. Evol. (1983) 19:397-410
#title Evolution of alpha- and beta-tubulin genes as inferred by the nucleotide sequence of sea urchin cDNA clones.
#cross-references MUID:84090258
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27-Nov-1985 #sequence_revision 27-Nov-1985 #text_change
10-Jul-1998
                                                                                                                                                                                                                                                                                             ##note sequence extracted from NCBI backbone (NCBIP:137967) #superfamily beta-thromboglobulin #length 75 #molecular-weight 7931 #checksum 8842
                                                                                                    A.; Opdenakker, G.; Van Damme, J.
Blochemistry (1993) 32:1010-1017
Human and bovine granulocyte chemotactic protein-2: compl
amino acid sequence and functional characterization as
#formal_name Bos primigenius taurus #common_name cattle
13-Sep-1994 #sequence_revision 18-Nov-1994 #text_change
12-Apr-1995
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#cross-link peptide (Glu-Tyr) (by tubulin-tyrosine liqase) #status predicted
#length 161 #checksum 1974
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#formal_name Mus musculus #common_name house mouse
12-May-1994 #sequence_revision 26-May-1994 #text_change
10-Jul-1998
829013; A61275
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tubulin alpha chain - sea urchin (Lytechinus pictus)
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Pred. No. 1.11e-01;
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Pred. No. 1.11e-01;
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heterodimer; microtubule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ##molecule_type mRNA
##rosidues 1-161 ##label ALE
                                                                                                                                                                                                                             ##status preliminary
##molecule_type protein
##residues 1-75 ##label PRO
                                                                                                                                                                                                                                                                                 ##experimental_source MDBK cells
                                                                                                                                                                                         #cross-references MUID:94001982
#accession B54188
                                                                                                                                                                                                                                                                                                                                                                       67.4%;
50.0%;
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Best Local Similarity 58.3%;
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Lewis, S.A.; Lee, M.G.S.; Cowan, N.J.
J. Cell Biol. (1985) 101:852-861
Five mouse tubulin isotypes and their regulated expression
                                                                                                                                                                                                                                 Edde, B.; Rossier, J.; Le Caer, J.P.; Berwald-Netter, Y.; Koulakoff, A.; Gros, F.; Denoulet, P. Cell. Biochem. (1991) 46:134-142.
A combination of posttranslational modifications is responsible for the production of neuronal alpha-tubulin
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#binding_site polyglutamate (Glu) (covalent) #status
experimental\
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carboxypeptidase) #status predicted\
#cross-link peptide (Glu-Tyr) (by tubulin-tyrosine
ligase) #status predicted
#length 371 #checksum 133
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                                                                                                                            ##molecule_type mRNA
##residues 20-371 ##label LE2
##cross-references EMBL:M28727; NID:g202224; PID:g202225
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67.4%; Score 58; DB 2; Length 371;
Best Local Similarity 58.3%; Pred. No. 1.11e-01;
Matches 7; Conservative 4; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                               Ruiz-Avila, L.; Canals, J.M.; Marsal, J.
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FICATION #superfamily tubulin
Y #length 387 #checksum 1954
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                                                                              during development.
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#cross-references MUID:92011952
#accession A61275
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S33517
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                                                                                                                                                   #authors Valenzuela, P.; Quiroga, M.; Zaldivar, J.; Rutter, W.J.;
Kirschner, M.W.; Cleveland, D.W.
#journal Nature (1981) 289:650-655
#title Nucleotide and corresponding amino acid sequences encoded by alpha and beta tubulin mRNAs.
#cross-references MUID:81123093
#accession A02968
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#cleavage_site Glu-Tyr (tubulin-specific carboxypeptidase) #status predicted/
#cross-link peptide (Glu-Tyr) (by tubulin-tyrosine ligase) #status predicted
#length 411 #checksum 7596
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tubulin alpha chain, brain-specific isotype (clone pTUB5)
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11-Aug-1995 #sequence_revision 11-Aug-1995 #text_change
02-U1-1998
A56635
A56635
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##molecule_type mRNA
##residues 1-411 ##label VAL
##cross-references GB:J00912; NID:g212835; PID:g212836; GB:V00388;
##cross-references GB:J00912; NID:g63070
IFICATION #superfamily tubulin
RDS heterodimer; microtubule
27-Nov-1985 #sequence_revision 27-Nov-1985 #text_change
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#journal DNA Seq. (1992) 3:257-262
#title Isolation of different brain-specific isotypes of
#cross-references MUD:93208376
#acrontents brain
#across-in-
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#length 444 #molecular-weight 49270 #checksum 2659
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##molecule_type mRNA
##residues 1-444 ##label COE
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Best Local Similarity 58.3%;
Matches 7; Conservative
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**************************************	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd	MPsrch_pp protein - protein database search, using Smith-Waterman algorithm	Run on: Fri Feb 4 18:08:02 2000; MasPar time 3.55 Seconds 71.844 Million cell updates/sec Tabular output not generated.	Title: >US-09-150-813-73 Description: (1-12) from US09150813.pep Perfect Score: 86 Sequence: 1 KACLNPASPWVK 12	Scoring table: PAM 150 Gap 15	Searched: 170751 segs, 21266608 residues	Post-processing: Minimum Match 0% Listing first 45 summaries	Database: a-geneseq35 1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part17 18:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part3 33:part33 34:part39 30:part38 31:part31 32:part37 38:part38

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. SUMMARIES

Mean 16.909; Variance 49.053; scale 0.345

Statistics:

	Pred. No.	3.85e-03	3.85e-03	3.85e-03	3.85e-03	3.85e-03	3.85e-03	3.85e-03	3.85e-03	3.85e-03	2.90e-02	2.90e-02	2.90e-02	2.90e-02	2.90e-02	2.90e-02	2.90e-02
	Description	human gro-beta polype	Human chemokine gro b	Human gro-beta chemok	MIP-2alpha.	Human chemokine gro b	Gro-beta/MIP-2-alpha.	Human macrophage infl	Human Gro beta cytoki	Human macrophage infl	Human mature gro-gamm	Chimeric interleukin-	Human gro-gamma chemo	Human chemokine gro g	Human chemokine gro g	Protein used to gener	MIP-2beta.
COTTUBRIOS	ID	W81499	W18025	R66699	R36771	W17671	R70793	R20529	R23034	R20589	W81500	W12434	R66700	W17672	W18026	R93194	R36772
	DB	39	25	12	7	24	13	4	4	4	33	23	12	24	25	17	7
	Query Match Length DB	73	73	73	73	73	102	101	107	107	73	73	73	73	73	73	73
æ	Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.9	91.9	91.9	91.9	91.9	91.9	91.9
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49 kaclnpaspmvk 60

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R2053035 R205305 R205305 R205306 R20590 R3098034 W18024 W18024 W170792 W170792 W170792 W170805 R20528 R2011 R20528	1; 73 AA. 1; 73 AA. 1; 73 AA. 1; 73 AA. 1; 75 AA. 1; 75 AA. 1; 75 AA. 1; 76 A. 1; 76 A. 1; 76 A. 1; 77 AA. 1; 78 A. 1; 7	Σ
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WPI; 93-182239/22.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sepsis, particularly septic shock are defined by a claim i. Page 19; 28pp; English.

Sclaim i. Page 19; 28pp; English.

A claimed method of treating or preventing sepsis comprises administering to an animal an effective amount of a chemokine selected from mature murine KC (see W18023), human gro alpha (see W18024), human gro beta (W18025) and human gro alpha (see W18026), modified fragments of these chemokines and multimeric proteins comprising an association of two chemokine proteins.

Sepsis can occur in hospitalised patients, and a consequence of bacterial sepsis is septic shock. The method of the invention provides a treatment for sepsis, particularly septic shock, which is a major cause of death in intensive care units. Septic shock syndrome apparently has intractable resistance to the effects of a variety of highly potent antimicrobial agents. Survival is a major cause of death in intensive care units. Survival is a variety of highly potent antimicrobial agents. Survival is a constant with the chemokines, both prophylactically
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Gro-alpha protein: chemokine: inflammation; antiinflammatory;
hematopoietic synergistic factor; HSF; hematopoietic precursor;
bone marrow; intercrine; desamino gro-beta; truncation.
Homo sapiens.
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/note= "desamino truncated gro-beta, claim 6,
                                                                                                                                                                                                                    30-0AN-1998 (first entry)
Human chemokine gro beta.
Sepsis; septic shock; therapy; gro beta; chemokine; human.
                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "preferred modified fragment of KC
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Pred. No. 3.85e-03;
0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
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                                                                                                                         л 2
W18025 standard; protein; 73 AA.
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(SMIK ) SMITHKLINE BEECHAM CORP.
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R66699 standard; protein; 73 AA.
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08-JUN-1993; US-073800.
(SMIK ) SMITHKLINE BEECHAM CORP.
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Best Local Similarity 100.0%;
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WPI; 95-036402/05
                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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A claimed method for reducing the no. of circulating platelets in the bloodstream of a mammal comprises admin. of MrP-1 and/or MIP-2 or their analogues to induce such a reduction. The MIP-1, MIP-2 or analogue may be operatively linked to a carrier. The MIPs can be used to inhibit megakaryocytopolesis to effect in vivo reduction of platelet nos. They can be used to treat disorders with excessively high platelet counts such as thrombocytosis, stroke, pulmonary emboli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Macrophage inflammatory protein; megakaryocytopoiesis; MIP-1; MIP-2; thrombocythemia; reactive thrombocytosis; stroke; emboli; platelet; myeloproliferative disorder.
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peptide(s) for inducing haematopoietic synergistic factor. Disclosure; Page 51-52; 89pp; English. Truncated, desamino chemokine comprising amino acids 5-73 of human mature gro-ben la sequence given in R66699; shows enhanced biological activity when compared to the mature protein, and has been used to prepare multimeric, modified
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Gro beta, chemokine; intercrine; myelosuppression; immunosuppression; hamantopoictic cell; infection; cancer; aplastic anaemia; autoimmune disease; stem cell transplant;
                                                                                                                                                                                                                                                                                                                Length 73;
                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
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Pred. No. 3.85e-03;
                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
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Best Local Similarity 100.0%;
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15-NOV-1991; US-792988.
(UYPE-) UNIV PENNSYLVANIA.
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24-OCT-1996; U17074.
24-OCT-1995; US-547262.
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Treating myelosuppression or any condition involving treating myelosuppression or any condition involving treating myelosuppression or any condition involving immunosuppression or low levels of haematopoietic cells claim 1; Page 21; 31pp; English: English
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Claim 12; Page 40; 60pp; English.

Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced sequence 102 AA;
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red. No. 3.85e-03;
0; Mismatches 0; Indels
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Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R70793 standard; Protein; 102 AA. R70793;
(SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 100.0%;
Local Similarity 100.0%;
les 12; Conservative
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WPI; 95-082239/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%;
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29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer; wound healing.
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                    King AG, Pelus LM;
WPI; 97-258957/23.
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WO9504158-A.
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83 kaclnpaspmvk 94

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Gaps
                                                                                                                                                                                                                                                                                                                                                                                                        acid sequence. Two classes of human cDNA homologous to mMIP-2 were found designated alpha and beta. The alpha form reproduced here is claimed in W09200327; the beta form (Q20530) is claimed in W09200326. The alpha form is the more abundant of the two. The genes can be used to produce recombinant MIP proteins for use in wound healing, to modulate myelopoiesis and to induce adjuvant
                                                                                                                                                                                                                                                                                                                                  Disclosure, Fig 2; 68pp; English.

The sequence was deduced from the DNA sequence obtd. by screening the USA COMA library prepd. from poly-A+ RNA from PMA treated and LPS stimulated cells, using as probe a fragment isolated from the mMIP-2 cDNA (see Q20728) encoding most of the mature mMIP-2 amino
                                                                                                                                                                                                                                                                                      Human macrophage inflammatory protein 2-alpha - useful in treating infections, cancer, myelopoietic dysfunction and auto: immune diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 107;
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Pred. No. 3.85e-03;
0; Mismatches 0; Indels
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                                       23-APR-1992 (first entry)
Human macrophage inflammatory protein (MIP) 2 alpha.
Inducible; secretory; inflammatory response; cytokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               See also R20588, R20590 and R20528-30.
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/label= leader
/note=_"putative"
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R20529 standard; Protein; 107 AA.
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/label= Gro_beta
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WPI; 92-150882/18.
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24-SEP-1991. U06936.
28-SEP-1990; UG-590223.
(CETU ) CETUS CORP.
(UYNC-) UNIV OF NORTH CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             colonic epithelial tumour cell.
                                                                                                                               /label= signal
                                                                                                                                                                                                                                (CHIR-) CHIRON CORP.
TEKAMP-01SON P, Gallegos CA;
WPI; 92-041519/05.
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Best Local Similarity 100.0%;
Matches 12; Conservative
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26-OCT-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human Gro beta cytokine.
                                                                                                                                                                      09-JAN-1992.
24-JUN-1991; U04482.
22-JUN-1990; US-541897.
19-JUN-1991; US-715194.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83 kaclnpaspmvk 94
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                                                                                       Homo sapiens.
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                                                                                                                                           WO9200326-A.
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                            diagnosing colon cancer Claim 12; Fig 1B; 46pp; English.

The CDNA clone coding for inflammatory cytokine Gro-beta was isolated from a mezerin- and calcium ionophore-stimulated leukocyte CDNA library. The amino acid sequence of Gro beta was deduced from the nucleotide sequence. The level of Gro beta in inflammatory response cells can be used as an indication of a test substance's see also 024267.
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The sequence was deduced from the DNA sequence obtd. by screening the sequence was deduced from the DNA sequence obtd. by screening the U937 cDNA library prepd. from poly-A+ RNA from PNA treated and LPS stimulated cells, using as probe a fragment isolated from the mMIP-2 cDNA (see Q20612) encoding most of the mature mMIP-2 amino acid sequence. Two classes of human cDNA homologous to mMIP-2 were found designated alpha and beta. The alpha form reproduced here is claimed in W09200327; the beta form (Q20614) is claimed in W09200326. The alpha form is the more abundant of the two. The wound healing, to modulate myelopoiesis and to induce adjuvant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human macrophage inflammatory protein 2-alpha - useful in treating infections, cancer, myelopoietic dysfunction and auto:
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0
               Gro beta and Gro gamma inflammatory cytokine(s) - for use in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;;
0
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Pred. No. 3.85e-03;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                               23-APR-1992 (first entry)
Human macrophage inflammatory protein (MIP) 2 alpha.
Inducible; secretory; inflammatory response; cytokine.
                                                                                                                                                                                                         Score 86; DB 4; LA Pred. No. 3.85e-03;
                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See also R20588, R20590 and R20528-30.
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R20589 standard; Protein; 107 AA.
R20589;
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W81500;
01-MAR-1999 (first entry)
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/label= signal
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Tekamp-Olson P, Gallegos CA;
WPI; 92-041518/05.
N-PSDB; Q20613.
                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0%;
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22-JUN-1990; US-541898.
19-JUN-1991; US-715195.
                                                                                                                                                                                                                                                                                        1 KACLNPASPMVK 12
                                                                                                                                                                                                                                                                      83 kaclnpaspmvk 94
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                                                                                                                                                                          107 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immune diseases
N-PSDB; Q24266
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                         12;
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                                                                                                                                                                                                                                            Treating and preventing sepsis in animals - by using two modified gro b chemokines in conjunction with an anti-infective agent Example 1; Page 19; 26pp; English.

This is the amino acid sequence of the human gro-gamma chemokine mature polypeptide. The invention relates to a method of preventing and treating sepsis using chemokines selected from mature or modified murine KC (see WB1497), or human gro-alpha (see WB1498), gro-beta (see WB1499) or for gamma (see WB1499). The modified gro-beta see wall accomprises amino acids 5-73 of the mature polypeptide. A claimed method uses a dimer composed of 2 modified gro-beta
                                                                                                                                                                                                                                                                                                                                                                                                                              chemokines. Further claimed is administering the chemokine in conjunction with an anti-infective agent. The chemokines described in this invention are required to treat and prevent sepsis since antimicrobial agents alone have failed to abrogate septic mortality. Sequence 73 AA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Chimeric interleaving receptor binding polypeptide G18132G.
Chimeric interleaving receptor mediated biological response; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Amino acids 34 to 73 of SEQ ID NO:2 in the specification from GRO-gamma" \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19.33
/note= "Amino acids 18 to 32 of SEQ ID_NO:1 in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "Amino acids 1 to 18 of SEQ ID NO:2 in the specification from GRO-gamma"
                                                                                      /note= "modified fragment, preferred for use in
  method of the invention"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
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                Gro-gamma; chemokine; human; sepsis; septic shock; therapy.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 79; DB 39; Length 73; Pred. No. 2.90e-02; 0; Mismatches 0; Indels
 Human mature gro-gamma polypeptide used to treat sepsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           specification from human interleukin-8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shyamala V, Siani M, Tekamp-Olson P,
                                                    Location/Qualifiers
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                                                                                                                                                                                           (SMIK) SMITHKLINE BEECHAM CORP. Demarsh PL, Johanson KO; WPI; 99-024031/02.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W12434 standard; peptide; 73 AA.
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Best Local Similarity 100.0%;
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18-JUN-1996; UI0536.
05-APR-1996; US-628893.
20-JUN-1995; US-493552.
27-JUN-1995; US-000698.
                                                                                                                                                                              29-APR-1997; US-846966.
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                                                                                                                                            05-NOV-1998.
29-APR-1998; U08742.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                49 kaclnpaspmv 59
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Blaney J, Shyamala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 97-087324/08.
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08~0CT-1997
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                                                                                                                                                      Gaps
chemokines (146G531 and 118G46I53G) also derived from human IL-8 and GRO-gamma, exhibit a chemokine protein structure capable of ILBR1 or ILBR2 binding. They can be used for modulating ILB receptor-mediated bindiqual responses. In particularly, they can bused for inhibiting ILB receptor signal transduction.

N.B. The present sequence is not shown in the specification but is derived from SEQ ID NO:1 and 2, see features table.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Balcarek JM, Bhatnagar P, King AG, Pelus LM;
WPI: 95-036402/05.
New truncated chemokine with increased biological activity - and related multimers, nucleic acid, antibodies etc., for treating inflammation, stimulating growth of bone marrow etc., also peptide(s) for inducing haematopoietic synergistic factor. Disclosure: Page 52: 89pp; English.
Truncated, desamino chemokine comprising amino acids 5-73 of
                                                                                                                                                                                                                                                                                                     Human gro-gamma chemokine,
Gro-alpha protein; chemokine; inflammation; antiinflammatory;
hematopoietic synergistic factor; HSF; hematopoietic precursor;
bone marrow; intercrine; desamino gro-gamma; truncation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human mature gro-gamma (full sequence given in R66700)
shows enhanced biological activity when compared to the mature
protein, and has been used to prepare multimeric, modified
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/note= "desamino truncated gro-gamma, claim 10,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gro gamma; chemokine; intercrine; myelosuppression; immunosuppression; haematopoietic cell; infection; cancer; aplastic anaemia; autoimmune disease; stem cell transplant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 79; DB 12; Length 73; Pred. No. 2.90e-02; 0; Mismatches 0; Indels
                                                                                                                         Length 73;
                                                                                                                                                      0; Indels
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                                                                                                                         Score 79; DB 23; I
Pred. No. 2.90e-02;
0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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                                                                                                                                                                                                                                                               R66700 standard; protein; 73 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SMIK ) SMITHKLINE BEECHAM CORP
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Local Similarity 100.0%;
les 11; Conservative
                                                                                                                         Query Match 91.9%;
Best Local Similarity 100.0%;
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                         19-JUL-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human chemokine gro gamma.
                                                                                                                                                                                                                                                                                                                                                                                                                 page 69"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JUN-1994; U06264.
08-JUN-1993; US-073800.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chemokines.
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Treating myelosuppression or any condition involving treating myelosuppression or any condition involving treating myelosuppression or any condition involving immunosuppression or low levels of haematopoietic cells claim 1, Page 21; 31pp. English.

This polypeptide sequence comprises human gro gamma. Use of mammalian chemokines selected from gro alpha (W17670), gro beta (W17671), gro gamma or KC (W17669) for mobilishing haematopoietic regulator, are used to treat myelosuppression or any condition that involves immunosuppression or low levels of haematopoietic regulator, are used to treat myelosuppression or any condition that involves immunosuppression or low levels of haematopoietic cells, e.g. infection, cancer, myelopoietic dysfunction, haematopoietic disorders, aplastic anaemia or autoimmune disease, or low production/differentiation of haematopoietic or bone marrow cells. A claimed application is in peripheral blood stem cell transplants in patients being treated by chemokines having an Niterminal deletion are more active, e.g. by 2 orders of magnitude, than the full-length protein. When used with a colony stimulating factor (CSF), a synergistic reduced. Compared with conventional methods of stem cell transplants, or reduced. Compared with conventional methods of stem cell transplants,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sepsis, particularly septic shock
Claim 1: Page 19-20: 28pp: English.
A claimed method of treating or preventing sepsis comprises
administering to an animal an effective amount of a chemokine
selected from mature murine KC (see W18023), human gro alpha (see
W18024), human gro beta (see W18025) and human gro gamma (W18026),
modified fragments of these chemokines and multimeric proteins
comprising an association of two chemokine proteins. Sepsis can
occur in hospitalised patients, and a consequence of bacterial
sepsis is septic shock. The method of the invention provides a
treatment for sepsis, particularly septic shock, which is a major
cause of death in intensive care units. Septic shock syndrome
apparently has intractable resistance to the effects of a variety
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use of mammaolian chemokines provides a more rapid release of peripheral blood mononuclear cells and/or platelets, reducing risk infection and allowing use of higher doses of chemotherapeutic
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Use of chemokine(s) such as KC and gro-alpha - to treat or prevent
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0.7MN-1998 (first entry)
Human chemokine gro gamma.
Sepsis; septic shock; therapy; gro gamma; chemokine; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "preferred modified fragment of KC
(Claim 5)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 73;
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Pred. No. 2.90e-02;
0; Mismatches 0;
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24-0CT-1996; U17074.
24-0CT-1995; US-547262.
(SMIK ) SMITHKLINE BEECHAM CORP.
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W18026 standard; protein; 73 AA.
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Best Local Similarity 100.0%;
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21-NOV-1995; US-007425.
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                                                                                      Pelus LM;
                                                                                      King AG, Pelus LM
WPI; 97-258957/23.
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Interleukin-8 receptor 1 specific binding domain peptide(s) - used
T interleukin-8 receptor 1 specific binding domain peptide(s) - used
Fxample 3; Page 42; Dipp; English.

Example 3; Page 42; Dipp; English.

This is the amino acid sequence of a protein (not designated in this specification but thought to be GRO(gamma), an agonist of the human control of the dipp; and thought to be GRO(gamma). The protein with corresp. The protein was used to generate GRO(gamma)/IL-8R1 binding domain chimaeras by replacing selected residues from the GRO(gamma) protein with corresp. residues from the GRO(gamma) protein with corresp. residues from the signal of the IL-8R binding opeptide with residues from the specific comprising an IL-8R2 binding peptide with residues from the specific comprising and IL-8R2 binding peptide with residues from the specific comprising of the IL-8 receptor type R1. These domains are found in the amino-terminal loop and strand 3 of the 3 stranded anti-parallel beta-sheet (Greek kep) of IL-8. In particular, residues 11 (Lys), C13 (Tyr), 48 (Glu), 49 (Leu) and 53 (pro) of the cative IL-8 are important for binding to the IL-8 R1 receptor.

C1 Substitutions, insertions or deletions of these residues may alter concerned the mediated biological response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JUL-1996 (first entry)
Protein used to generate IL-8/Gro(gamma) chimeric peptides.
Protein used to generate IL-8/Gro(gamma) chimeric receptor;
Native; human, interleukin-8; specific binding domain; receptor;
amino-terminal loop; anti-parallel; beta-sheet; Greek key; substitution;
insertion; deletion; reduction; enhancement; chemo-attractant;
neutrophil; modulation; biological response.
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                                                                                                                                                                                                                                                                                         Gaps
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of highly potent antimicrobial agents. Survival is increased by treatment with the chemokines, both prophylactically and after
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                                                                                                                                                                                               Score 79; DB 25; Length 73;
Pred. No. 2.90e-02;
0; Mismatches 0; Indels
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Pred. No. 2.90e-02;
0; Mismatches 0; Indels
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R93194 standard; protein; 73 AA.
R93194;
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Best Local Similarity 100.0%;
Matches 11; Conservative
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20-JUN-1995; U07895.
20-JUN-1994; US-262990.
(CHIR ) CHIRON CORP.
Tekamp-Olson P, Venkatak
                                                                                                                                                                                                                                                                                                                                                      49 kaclnpaspmv 59
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                                                         infection. 73 AA;
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WO9535376-A2.
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein . protein database search, using Smith-Waterman algorithm MPsrch_pp Run on:

Fri Feb 4 18:15:07 2000; MasPar time 2.54 Seconds 133.743 Million cell updates/sec not generated. Tabular output

Title:

>US-09-150-813-74 (1-12) from US09150813.pep 86 Description: Perfect Score:

1 KACLNPASPMVQ 12 PAM 150 Gap 15 Scoring table: Sequence:

77977 seqs, 28268293 residues Searched:

summaries Post-processing:

Minimum Match 0% Listing first 45

Database:

swiss-prot37 1:swissprot

Variance 26.272; scale 0.908 Mean 23.866; Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1994 (REL. 17, LAST SEQUENCE UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN-2-ALPHA PRECURSOR (MIP2-ALPHA) (GROWTH REGULATED PROTEIN BETA) (GRO-BETA).
GROZ OR GROB OR MIP2A.
HOMO SADTEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROC. NATL. 'ACAD. SCI. U.S.A. 87:7732-7736(1990).
-!- FUNCTION: PRODUCED BY ACTIVATED MONOCYTES AND NEUTROPHILS AND EXPRESSED AT SITES OF INFLAMMATION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIINE; 90377259.

IIDA N., GROTENDORST G.R.;

"Cloning and sequencing of a new gro transcript from activated human monocytes: expression in leukocytes and wound tissue.";

MOL. CELL. BIOL. 10:5596-5599(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE; 91017578.
HASKILL S., PEACE A., MORRIS J., SPORN S.A., ANISOWICZ A., LEE S.W.,
SMITH T., MARTIN G., RALPH P., SAGER R.;
"Identification of three related human GRO genes encoding cytokine
                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TEKAMP-OLSON TO GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B., FABRE M., VAN DEVENTER S., CERAMI A.; "Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues."; J. EXP. MED. 172:911-919(1990).
                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                              MACROPHAGE INFLAMMATORY PROTEIN
                                                                                                                                                                                        DB 1; Length 107;
                                                                                                                                                                                                                      0; Indels
                                                CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL
                                                                                                                          SIMILARITY.
A -> G (IN REF. 2).
6F2A63D2 CRC32;
                                                                                                                                                                                                         Pred. No. 8.99e-10;
                                                                                                                                                                                                                         0; Mismatches
                                                                                                             BY SIMILARITY.
PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                           Score 86;
                                                                                                2-BETA
                                                                                                                            ΒX
                                                                                                                                              Ş
                                                                                                                                                          107 AA; 11342 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-HISTIOCYTIC LYMPHOMA; MEDLINE; 90354792.
                                                                                                                                                                                           Query Match
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X53799; G34659; -.
EMBL; M36820; G183629; -.
EMBL; M57731; G183627; -.
                                                                                                                                                                                                                         12; Conservative
                                                                                                                                                                                                                                                                                                                                                    STANDARD;
              PFAM; PF00048; i18; 1.
HSSP; P09341; 1MGS.
                                                                34
                                                                                                             69
85
28
                                                                                                                                                                                                                                                                         1 KACLNPASPMVQ 12
                                                                                                                                                                                                                                                       83 KACLNPASPMVQ 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                             43
45
27
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                                                                                                                                                                                                                                                                                                                                                    MI2A_HUMAN
P19875;
   PROSITE;
                                                                                                            DISULFID
                                                                                                                                                          SEQUENCE
                                                                                                                               DISULFID
                                                                                                                                              CONFLICT
                                                                SIGNAL
                                                                                 CHAIN
                                                                                                                                                                                                                           Matches
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A PART A

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"Constitutive overexpression of a growth-regulated gene in transformed Chinese hamster and human cells.";
PROC. NATL. ACAD. SCI. U.S.A. 84.7188-7192(1987).
-!- FUNCTION: HAS CHEMOTACITE ACTIVITY FOR NEUTROPHILS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SWALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CRICETULUS GRISEUS (CHINESE HAMSTER).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; CRICETINAE; CRICETULUS.
                                                                                                                                                        MACROPHAGE INFLAMMATORY PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 73; DB 1; Length 101; Pred. No. 4.35e-06;
                                                                                                                                                                                                                                                                                       Length 107;
                                                                                                                                                                                                                                                                                                                                 0: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                            CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                             2-ALPHA.
BY SIMILARITY.
BY SIMILARITY.
i. 6E431A15 CRC32;
                                                                                                                                                                                                                                                                                                            .26e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-DEC-1992 (REL. 24, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN PRECURSOR.
                                                                                                                                                                                                                                                                                   Score 79; DB 1;
Pred. No. 9.26e-0
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101 AA.
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BY SIMILARITY.
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PFAM; PF00048; i18; 1. 
HSSP; P10889; 1M12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GRO PROTEIN.
                                     PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1. PFAM; PF00048; 118; 1. HSSP; P09341; 1MGS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL
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                                                                                                                                                                                                                                            11389 MW;
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81.8%;
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                                                                                                                                                                                                                                                                                          91.9%;
                                                                                                                                                                                                                                                                                                            Local Similarity 100.0%;
nes 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
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101
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2 ACLNPASPMVQ 12
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45
107 AA;
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PIR; JH0281; JH0281.
MIM; 139110; -.
                                                                                                                                                                                                                                                                                                                                                                               83 KACLNPASPMV 93
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P09340;
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DISULFID
SEQUENCE
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KONISHI K., TANKKA Y., YAMAMOTO M., YOMOGIDA K., WATANABE K., TSURUFUJI S., FUJIOKA M.; "Structure of the gene encoding rat neutrophil chemo-attractant Gro."; GENE 126:285-286(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HANZAWA H., HARDYAMA H., KONISHI K., WATANABE K., TSURUFUJI S.; "Solution structure of CINC/Gro investigated by heteronuclear NMR."; J. BLOCHEM. 123:62-70(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HANZAWA H., HARUYAWA H., WATANABE K., TSURUFUJI S.;
"The three dimensional structure of rat cytokine CINC/Gro in solution
by homonuclear 3D NMR.";
                                         01-JAN-1990 (REL. 13, CREATED)
01-JAN-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN PRECURSOR (CYTORINE-INDUCED NEUTROPHIL
CHEMOATTRACTANT) (CINC-1) (PLATELET-DERIVED GROWTH FACTOR-INDUCIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 97335927.
WHATAMA H., HARUTAMA H., KONISHI K., WATANABE K., ISURUFUJI S.; "Subunit association and monomer structure of CINC/Gro revealed by 1H-NNR.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "The neutrophil chemoattractant produced by the rat kidney epithelioid cell line NRK-52E is a protein related to the KC/gro
                                                                                                                                                                                                                                                                                                                                                                     HTANG S., PAULAUSKIS J., KOBZIK L.;
"Rat KC CDNA cloning and mRNA expression in lung macrophages and
fibroblasts.":
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=CD-1, TISSUE=LUNG;
MEDLINE; 93035653.
HUANG S., PAULAUSKIS J.D., GODLESKI J.J., KOBZIK L.;
"Expression of macrophage inflammatory protein-2 and KC mRNA in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a rmember of rat GRO/CINCs, is a predominant chemokine produced by lipopolysaccharide-stimulated rat macrophages in culture.";
BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WATANABE K., KONISHI K., FUJIOKA M., KINOSHITA S., NAKAGAWA H.;
                                                                                                                                                                           EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALLA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATIUS.
                                                                                                                                                                                                                                                                                                                                                                                                                   BIOCHEM. BIOPHYS. RES. COMMUN. 184:922-929(1992)
                  96 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIOL. CHEM. 264:19559-19563(1989).
                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pulmonary inflammation.";
AM. J. PATHOL. 141:981-988(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIOCHEM. 121:835-841(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ny homonuclear 3D NMR.";
EBS LETT. 354:207-212(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 36-88 FROM N.A.
                  STANDARD;
                                                                                                                                                         NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 25-56.
                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 93246259.
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                                                                                                                                                                                                                                                                                                                                                       92246987
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                                                                                                                             PROTEIN KC).
                                                                                                                                                                                                                                                                                                                                                                                                   fibroblasts.
4
GRO_RAT
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NEUTROPHIL ACTIVATION DURING INFLAMMATION.
-!- SUBBUNT: MONOMER AND HOMODIMER.
-!- IISSUE SPECIFICITY: AT LEAST EXPRESSED IN THE LUNG AND TRACHEA.
-!- INDUCTION: IN LING, BY LIPOPOLYSACCHARIDE OR INFLAMMATION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YOSHLMURA T., TAKEYA M., OGATA H., GILLITZER R.; SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; HYSTRICOGNATHI; CAVIIDAE; CAVIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 71; DB 1; Length 96;
Pred. No. 1.52e-05;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; GROWIH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GROWTH REGULATED PROTEIN.
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SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E49B1A5A CRC32;
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(REL. 37, LAST ANNOTATION UPDATE)
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BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1. PFAM; PF00048; i18; 1. HSSP; P09341; 1MSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=HARTLEY WHITE; TISSUE=SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GROWTH REGULATED PROTEIN PRECURSOR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-DEC-1998 (REL. 37, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10249 MW;
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"Molecular characterization and chromosomal mapping of melanoma growth stimulatory activity, a growth factor structurally related to beta-thromboglobulin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHROEDER J.-M., PERSOON N.L.M., CHRISTOPHERS E.;
"Lipopolysaccharide-stimulated human monocytes secrete, apart from neutrophil-activating peptide 1/interleukin 8, a second neutrophilactivating protein. NH2-terminal amino acid sequence identity with melanoma growth stimulatory activity.";
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                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                        01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN PECURSOR (MELANOVA GROWTH STIMULATORY
ACTIVITY) (MGSA) (NEUTROPHIL-ACTIVATING PROTEIN 3) (NAP-3).
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BAREN N.E., KUCERA G., RICHMOND A.;
activity (MGSA) gene.";
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HOMO SAPIENS (HUMAN).
BETARACA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PRIMATES; CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANISOWICZ A., BARDWELL L., SAGER R.; "Constitution overexpression of a growth-regulated gene in transformed Chinese hamster and human cells."; PROC. NATL. ACAD. SCI. U.S.A. 84:7188-7192(1987).
                                                                                                                                                                   Length 104;
                                                                                                                                                                                                  1; Indels
              EMBL; AF052004; G2981063; --
EMBL; AF052005; G2981065; --
PROSTITE; PS00471; SMALL_CYPKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                     Score 71; DB 1; L
Pred. No. 1.52e-05;
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                                                                                                                                       104 AA; 11069 MW;
                                                                                                                                                                     Query Match
Best Local Similarity 72.7%;
Matches 8; Conservative
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 EMBL; U95810; G2735491;
                                                                                          104
66
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J. BIOL. CHEM. 269:32909-32915(1994).
-!- FUNCITON: HAS CHEMOTA-CITC ACTIVITY FOR NEUTROPHILS. MAY PLAY A
ROLE IN INFLAMMATION AND EXERTS ITS EFFECTS ON ENDOTHELIAL CELLS
IN AN AUTOCRINE FASHION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
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CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                    WEN D., ROWLAND A., DERYNCK R.; "Expression and secretion of gro/MGSA by stimulated human endothelial
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KIM K.S., CLARK-LEWIS I., SYKES B.D.; "Solution structure of GRO/melanoma growth stimulatory activity
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EMBL; X54489; G34626; -...
PIR; A28414, A28414.
PIR; S00983; S00983.
PIR; S03976; S
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Best Local Similarity
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POSSIBLE FUNCTION
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P10889;
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                                                                                                                     SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARIIY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
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"The platelet-derived growth factor-inducible KC gene encodes a
secretory protein related to platelet alpha-granule proteins.";

J. BIOL. CHEM. 264:4133-4137(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GROWTH REGILATED PROTEIN HOMOLOG GAMMA, BY SIMILARITY.

BY SIMILARITY.
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01-0CT-1989 (REL. 12, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN PRECURSOR (PLATELT-DERIVED GROWTH FACTOR-INDUCIBLE PROTEIN KC) (SECRETORY PROTEIN N51).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OHMORI Y., FUKUMOTO S., HAMILTON T.A.; "Two structurally distinct kappa B sequence motifs cooperatively
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RYSECK R.P., MACDONALD-BRAVO H., MATTEI M.-G., BRAVO R.; "Cloning and sequence of a secretory protein induced by growth factors in mouse fibroblasts."; EXP. CELL RES. 180:266-275(1989).
           EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOVINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 66; DB 1; Length 98;
Pred. No. 3.27e-04;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                               EMBLI, UDOBLII, GALGONACIO, YOTORINES_CXC, 1.
PROSITE: PEGOWIH FACIOR; INFLAMMATORY RESPONSE; SIGNAL.
SIGNAL. 1 29 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ECCC2B4C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39 65
41 81
98 AA; 10393 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         76.7%;
88.9%;
                                                                                                                                                                     C-X-C) (CHEMOKINE CXC).
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                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U95811; G2735493; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8; Conservative
                                                                       SEQUENCE FROM N.A.
YOSHIMURA T., MODI W.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MOUSE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GRO1 OR GRO OR MGSA
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE; 89078502.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81 CLNPAAPMV 89
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MUS MUSCULUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IISSUE=LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GRO_MOUSE
P12850;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 9828558.
MEDLINE; 9828558.
MEDLINE; 9828558.
SHAO W., JERNA L.F., WEST J., LOLIS E., SCHWEITZER B.I.;
"Solution structure of murine macrophage inflammatory protein-2.";
BIOCHEMISTRY 37:8303-8313(1998).
-!-FUNCTION: CHEMORATIC FOR HUMAN POLYMORPHONUCLEAR LEUKOCYTES BUT DOES NOT INDUCE CHEMOKINESIS OR AN OXIDATIVE BURST.
-!- SUBBUNIT: HOMOTETRAMER.
-!- SUBINIT: HOMOTETRAMER.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C.Y.C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                 CERAMI A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PIR; JH0200; JH0200.
PDB: IMI2: 29-APR-98.
MGD: MGI:96991; MIP2.
PROSITE: PS00411; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; i18; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                      WOLPE S.D., SHERRY B., JUERS D., DAVATELIS G., YURT R.W., CERAM "Identification and characterization of macrophage inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MACROPHAGE INFLAMMATORY PROTEIN 2.
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                                                                                                                                                                                                                                          TEKAMP-OLSON P., GALLEGOS C., BAUER D., MCCLAIN J., SHERRY B. "Cloning and characterization of cDNAs for murine macrophage inflammatcary protein 2 and its human homologues."; EXP. MED. 172:911-919(1990).
                                                                                                                                     SUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALLA; EUTHERIA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GROG_BOVIN STANDARD; PRT; 98 AA.
046675;
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG GAMMA PRECURSOR (GRO-GAMMA).
BOS TAURUS (BOVINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 67; DB 1; Length 100;
Pred. No. 1.79e-04;
01-JUL-1989 (REL. 11, CREATED)
01-FCB-1991 (REL. 17, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOFATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2 PRECURSOR (MIP2).
MIP2 OR MIP-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROC. NATL. ACAD. SCI. U.S.A. 86:612-616(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100 AA; 10621 MW; 333AC6A4 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or send an email to license@isb-sib.ch).
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                                                                                                              MUS MUSCULUS (MOUSE)
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1 KACLNPASPMVQ 12
                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 90354792.
                                                                                                                                                                                                                                                                                                                                                                               OF 28-59.
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                                                                                                                                     EUKARYOTA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
YOSHHAURA T., MODI W.S.;
SUBMITTED (MAR. 1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
           J. IMMUNOL. 155:3593-3600(1995).
-!- FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS. CONTRIBUTES TO NEUTROPHIL ACTIVATION DINFLAMMATION (BY SIMILARITY).
-!- INDUCTION: BY PLATELET -DERIVED GROWTH FACTOR. IN LUNG, BY
                                                    LIPOPOLYSACCHARIDE OR INFLAMMATION (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GROWTH REGULATED PROTEIN HOMOLOG ALPHA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BOS TAURUS (BOVINE).
EUKARYOTA, METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
ARTIODACTYLA; RUMINANTIA; PECORA; BOVOIDEA; BOVIDAE; BOS
 control LPS-induced KC gene transcription in mouse macrophages.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
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15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG ALPHA PRECURSOR (GRO-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 96;
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CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                         CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                  GROWTH REGULATED PROTEIN. BY SIMILARITY. BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 1.08e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                          36FDD348 CRC32;
                                                                                                                                                                                                                   EMBL; J04596; G201043; -
EMBL; U20534; G706843; -
EMBL; N2057; G706843; JOINED.
EMBL; N32954; A32954; -
PIR; JH0081; JH0081.
MGD; MGI:108068; GRO1.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF0048; 118; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                           10254 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sest Local Similarity
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2 ACLNPASPMVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                             96 AA;
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YOSHIMURA T., MODI W.S.;
SUBMITITED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
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                                                                                                                                                                                                                                                                                                                                                                                         15-DEC-1998 (REL. 37, CREATED)
15-DEC-1998 (REL. 37, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG BETA PRECURSOR (GRO-BETA).
BOS TARRUS (BOYINE).
EUKARYOTA, METAZOA; CHORDATA, VERTEBRATA, MAMMALIA, EUTHBRIA,
ARTIODACTYLA, RUMINANTIA, PECORA, BOVOIDEA, BOVIDAE; BOSINAE; BOSINAE
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RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-1993 (REL. 25, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 2 PRECURSOR (MIP2) (CINC-3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 64; DB 1; Length 104;
Pred. No. 1.08e-03;
2; Mismatches 0; Indels
                                                                                       Score 64; DB 1; Length 104; Pred. No. 1.08e-03;
                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U95813; G2735497; -.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2C63B23D CRC32;
                       CCFD567E CRC32;
                                                                                                                                              2; Mismatches
                                                                                                                                                                                                                                                                                                                                               104 AA.
BY SIMILARITY.
BY SIMILARITY.
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STRAIN=FISHER 344; TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-1993 (REL. 25, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  104 AA; 10950 MW;
                                                 10984 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74.48;
                                                                                               74.48;
77.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        larity 77.8%;
Conservative
                                                                                                                                              7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RATTUS NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                           104 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 CLNPTAPMV 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 CLNPASPMV 11
                                                                                                                                                                                               82 CLNPTAPMV 90
                                                                                                                                                                                                                                                3 CLNPASPMV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MIP2 OR MIP-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRISCOLL K.;
                                                                                                                                                                                                                                                                                                                                               GROB_BOVIN
046677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIP2_RAT
P30348;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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                                                 SEQUENCE
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Gaps

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Indels

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Best Local Similarity 70.0%; Pred. No. 3.51e-03; Matches 7; Conservative 2; Mismatches 1;
                                                                                                                                                                            RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBUNT: HOWOTETRAMER.
-!- TISSUE SPECIFICITY: AT LEAST EXPRESSED IN THE LUNG AND TRACHEA.
-!- INDUCTION: IN LUNG, BY LIPOPOLYSACCHARIDE OR INFLAMMATION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Identification of cytokine-induced neutrophil chemoattractants (CINC), rat GRO/CINC-2 alpha and CINC-2 beta, produced by granulation tissue in culture: purification, complete amino acid sequences and characterization."
                                                         FENG L., XIA Y., YOSHIMURA T., WILSON C.B.; "Modulation of neutrophil influx in glomerulonephritis in the rat with anti-macrophage inflammatory protein-2 (MIP-2) antibody."; J. CLIN. INVEST. 95:1009-1017(1995).
                                                                                                                                                                                                                                                                                                                                      HUANG S., PAULAUSKIS J.D., GODLESKI J.J., KOBZIK L.; "Expression of macrophage inflammatory protein-2 and KC mRNA in pulmonary inflammation.".
AM. J. PATHOL. 141:981-988(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MACROPHAGE INFLAMMATORY PROTEIN 2.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 94318061.
NAKAGAWA H., KOMORITA N., SHIBATA F., IKESUE A., KONISHI K.,
FUJIOKA M., KATO H.;
                                                                                                                                                                                                        FARONE A., FARONE M., SHI M.M., KOBZIK L., PAULAUSKIS J.D.; SUBMITTED (MAR-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1AE9A34E CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIR; S21467; S21467.
SMOSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PFAM; PF00048; 118; 1.
HSSP; P10889; 1M12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. J. 301:545-550(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10783 MW;
                                                                                                                                                                                                                                                                        SEQUENCE OF 39-91 FROM N.A.
                                                                                                                                                                                                                                                                                              STRAIN=CD-1; TISSUE=LUNG; MEDLINE; 93035653.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C-X-C) (CHEMOKINE CXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; S77604; G998407; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; U45965; G1228141; -
EMBL; S45855; E62497; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X65647; G56666; ~.
                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN-CD; TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 32-100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       38
100 AA;
  SEQUENCE FROM N.A.
                                            MEDLINE; 95189993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 32-59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   characterization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-WISTAR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
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RRYKY BERRYKY BERRYK BERRY
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Length 100;

DB 1;

Score 62;

72.18;

Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBUNIT: HÓMODIMER (PROBABLE).
-!- INDUCTION: GENERATED DURING AN INFLAMMATORY REACTION.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE; TISSUE-ALVEOLAR MACROPHAGE;
MEDLINE; 95129889.
JOHNSON M.C., GOODMAN R.B. II, KAJIKAWA O., WONG V.A., MONGOVIN S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Identification of a second neutrophil-chemoattractant cytokine generated during an inflammatory reaction in the rabbit peritoneal earlyty in vivo. Purification, partial amino acid sequence and structural relationship to melanoma-growth-stimulatory activity."; BIOCHEM. J. 278:493-497(1991).
-!- FUNCTION: HAS CHEMOTACTIC ACTIVITY FOR NEUTROPHILS (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOSE P.J., COLLINS P.D., PERKINS J.A., BEAUBIEN B.C., TOTIY N.F., WATERFIELD M.D., HSUAN J., WILLIAMS T.J., "Identification of a second neutrophil-chemoattractant cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Cloning of two rabbit GRO homologues and their expression in alveolar macrophages.";
                                                                                                                                                                                                                                                                                                                                                            EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY; MEDLINE; 91378900.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 57; DB 1; Le
Pred. No. 6.07e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00471; SMALL_CYTOKINES_CXC; PARTIAL. PFAM; PF00048; i18; 1. HSSP; P09341; 1MSH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE
                                                                                                                                                                                                                   01-JUL-1993 (REL. 26, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
PREMEMBALLITY FACTOR 2 (RPE2) (FRAGMENT).
ORXCTOLAGUS CUNICULUS (RABBIT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N -> S (IN REF. N -> S (IN REF.
                                                                                                                                                                     71 AA
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BY SIMILARITY.
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                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                            LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7713 MW;
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80.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; L19157; G309960; -.
                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENE 151:337-338(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; S17507; S17507
78 CLNPEAPLVQ 87
                                                    3 CLNPASPMVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 1-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY)
                                                                                                                                                               GRO1_RABIT
P30782;
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CONFLICT
NON_TER
SEQUENCE
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-!- FUNCTION: PLAYS A ROLE IN MONOCYTE ADHESION TO THE ENDOTHELIUM.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                               NOLTE O.J.;
SUBMITTED (CCT-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.
SUBMITTED (CCT-1995) TO EMBL/GENBANK/DDBJ DATALYZES THE TRANSCRIPTION
- !- FUNCTION: DNA-DEPENBENT RNA POLYMERASE CATALYZES THE TRANSCRIPTION
OF DNA INTO RNA USING THE FOUR RIBONUCLEOSIDE TRIPHOSPHATES AS SUBSTRAITES.
                                                                                                                                                                                               BACTERIA; PROTEOBACTERIA; BETA SUBDIVISION; NEISSERIACEAE; NEISSERIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                    -!- CATALYTIC ACTIVITY: N NUCLEOSIDE TRIPHOSPHATE = N PYROPHOSPHATE
                                                                                                                                                                                                                                                                                                                                                                                                                    -i-SUBDUTT: THE ENZYME CONSISTS OF THE SIGMA CHAIN AND THE CORE ENZYME WHICH IS COMPOSED OF 2 ALPHA CHAINS, I BETA CHAIN, AND 1
                                                   01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
11-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
11-DEC-1998 (REL. 37, LAST ANNOTATION UPDATE)
11-DEC-1998 (REL. 37, LAST SEQUENCE BETA CHAIN (EC 2.7.7.6) (TRANSCRIPTASE
11-DEC-19-19 (RNA POLYMERASE BETA SUBUNIT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -! - SIMILARITY: BELONGS TO THE RNA POLYMERASE BETA CHAIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
SCHWARTZ D., CHAVERRI-ALAMADA L., BERLINER J., KIRCHGESSNER T.,
QUISOMORO D., FANG J., TEKAMP-OLSON P., LUSIS J., FOGELMAN A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
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01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
01-FEB-1996 (REL. 33, LAST ANNOTATION UPDATE)
GROWTH REGULATED PROTEIN HOMOLOG PRECURSOR (GRO HOMOLOG).
ORYCTOLAGUS CUNICULUS (RABETI).
EUKARYOTA: METAZOA; CHORDATA: VEFTEBRATA; MAMMALIA; EUTHERIA;
LAGOMORPHA; LEPORIDAE; ORYCTOLAGUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 57; DB 1; Length 1389;
Pred. No. 6.07e-02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Z54353; E244390; -.
PROSITE; PS01166; RNA_POL_BETA; 1.
PPRAM; PFO0562; RNA_POL_BE; 1.
TRANSFERASE; TRANSCRIPTION; DNA-DIRECTED RNA POLYMERASE.
SEQUENCE 1389 AA: 155579 MW; 5E84C720 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104 AA
               PRT; 1389 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66.3%;
Similarity 70.0%;
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                 STANDARD;
                                                                                                                                                                                NEISSERIA MENINGITIDIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   717 ACLRPEKPMV 726
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Best Local Similarity
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P47854;
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the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                            PROBABLE.
GROWTH REGULATED PROTEIN HOMOLOG.
                                                                                                                                                                                                                                               Score 55; DB 1; Length 104;
Pred. No. 1.82e-01;
3; Mismatches 0; Indels
                                                                                                                                                 CYTOKINE; GROWTH FACTOR; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                        BY SIMILARITY.
BY SIMILARITY.
C75AEF07 CRC32;
                                                                                                  PROSITE: PS00471; SNALL_CYTOKINES_CXC; 1.
PFAM: PF00048; 118; 1.
HSSP; P09341; 1MGS.
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Similarity 66.7%;
6; Conservative
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104
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82
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42
104 AA;
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

protein - protein database search, using Smith-Waterman algorithm Run on:

MPsrch_pp

Fri Feb 4 18:14:20 2000; MasPar time 3.60 Seconds 133.572 Million cell updates/sec

Tabular output not generated.

>US-09-150-813-74 (1-12) from US09150813.pep 86

Title: Description: Perfect Score: Sequence:

1 KACLNPASPMVQ 12

PAM 150 Gap 15 Scoring table:

122810 seqs, 40068593 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

pir60 1:pirl 2:pir2 3:pir3 4:pir4

Mean 23.035; Variance 28.866; scale 0.798 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		do			SUMMARIES		
Result	0,000	Query	1	ä	4		
	3001	March	march bength	a :	1D	Description	Pred. No.
7	86	100.0	107	7	B38290	GRO-qamma precursor -	2.016-08
7	79	91.9	107	~	JH0281	macrophage inflammato	1.26e-06
m	73	84.9	101	7	B28414	growth-regulated prot	3.958-05
4	71	82.6	53	~1	164831	gene KC protein - rat	1.226-04
ı,	71	82.6	96	7	JN0572	റ	1.22e-04
، م	70	81.4	107	7	A28414	melanoma growth-stimu	2.12e-04
~ `	67	77.9	100	7	JH0200	macrophage inflammato	1.11e-03
30	64	74.4	96	7	A32954	gro-alpha precursor -	5.596-03
o o	62	72.1	53	7	151886	macrophage inflammato	1.619-02
10	62	72.1	100	7	155614	macrophage inflammato	1.616-02
11	62	72.1	100	~1	S21467		1.616-02
12	53	61.6	233	(7)	A29029	gag polyprotein - mou	1.52e+00
13	23	61.6	591	Н	FOMVMM	qaq polyprotein - mou	1.526+00
14	53	61.6	610	~	S20444	leukotriene-A4 hvdrol	1.526+00
15	52	60.5	119	7	S42881	platelet basic protei	2.450+00
16	52	60.5	128	٦	TGHU	beta-thromboglobulin	2.450+00
17	25	60.5	419	7	S74500	zeaxanthin qlucosyl t	2.45e+00
87	51	59.3	161	7	UBURAL	tubulin alpha chain -	3.93e+00
61	51	σ	387	7	833517	tubulin alpha chain -	3.93e+00
20	51	59.3	411	~	UBCHA	tubulin alpha chain -	3.93e+00
21	51	σ	444	7	S25004		3.93e+00
22	21	59.3	444	7	A56635	tubulin alpha chain.	3.936+00
23	51	59.3	448	7	A25873		

59.3 448 2 177427 tubulin alpha chain i 3.93e+00 59.3 449 2 800253 tubulin alpha chain - 3.93e+00 59.3 449 2 177428 tubulin alpha-2 chain 3.93e+00 59.3 450 2 277428 tubulin alpha chain i 3.93e+00 59.3 450 2 843138 tubulin alpha chain - 3.93e+00 59.3 450 2 85622 tubulin alpha chain - 3.93e+00 59.3 451 2 JC4133 tubulin alpha chain - 3.93e+00 59.3 451 2 JC4133 tubulin alpha chain - 3.93e+00 59.3 451 2 L04433 tubulin alpha chain - 3.93e+00 59.3 451 2 L04903 tubulin alpha chain - 3.93e+00 59.3 451 2 I77403 tubulin alpha chain - 3.93e+00 59.3 451 2 I77403 tubulin alpha chain i 3.93e+00 59.3 451 2 I77403 tubulin alpha chain i 3.93e+00 59.3 451 2 I77403 tubulin alpha chain i 3.93e+00 59.3 451 2 I77403 tubulin alpha chain i 3.93e+00 59.3 451 2 I77403 tubulin alpha chain i 3.93e+00 59.3 451 2 I77403 tubulin alpha chain i 3.93e+00 59.3 452 2 S42033 tubulin alpha chain - 3.93e+00 59.3 452 2 S42033 tubulin alpha chain - 3.93e+00 59.3 452 2 S42033 tubulin alpha chain - 3.93e+00 59.3 614 2 S58444 SUD35 protein - Afric 3.93e+00	#Lype complete recursor - human beta Homo sapiens #common_name man #sequence_revision 27-Oct-1995 #text, 290; C46519 "P -; Gallegos, C.; Bauer, D.; McCla Fabre, M.; van Deventer, S.; Ceram (1990) 172:911-919 Characterization of cDNAs for murine	ces MID: 90354792 Lype mRNA 1-107 ##label TEK erences GB:X53800; NID:934662; PID:934663 A38290 A: Lee, S.W.; Smith, T.; Martin, G.; Ralph, A.; Lee, S.W.; Smith, T.; Martin, G.; Ralph, C.; Martin, G.; Ralph, A.; Lee, S.W.; Smith, T.; Martin, G.; Ralph, A.; Lee, S.W.; Smith, T.; Martin, G.; Ralph, C.; Ces MUD: 91017578 B38290 Lype mRNA Lype mRNA	Proost, P.; De Wolf-Peeters, Billiau, A.; Van Damme, J. Janlilau, A.; Van Damme, J. Janlilau, A.; Van Damme, J. Janunol. (1993) 150:1000-11dentification of a novel gras (GCP-2) from human tumor ce comparison with natural for nees MUID:9319489 C46519 Lype protein 35-52 ##label PRO ntal_source MG-63 osteosarcoma 4921 #superfamily beta-thromboglob
24 254 256 27 27 28 29 30 31 31 31 31 31 31 31 31 31 31 31 31 31	LT E E RNATE NISM SSION RENCE autho	#Cross-referen #accession ##molecule ##molecule ##roross-ref #authors #journal #journal #title #cross-referen #accession #accession ##molecule ##molecule ##molecule ##molecule ##molecule ##molecule	## ## ## ## ## ## ## ## ## ## ## ## ##
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#length 107 #molecular-weight 11389 #checksum
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#product macrophage inflammatory protein 2 alpha #status predicted #label MAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #authors Iida, N.; Grotendorst, G.R.
#journal Mol. Cell. Biol. (1990) 10:5596-5599
#title Cloning and sequencing of a new gro transcript from activated human monocytes: expression in leukocytes and wound tissue.
#cross-references MUID:90377259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haskill, S.; Peace, A.; Morris, J.; Sporn, S.A.; Anisowicz, A.; Lee, S.W.; Smith, T.; Martin, G.; Ralph, P.; Sager, R. Proc. Natl. Acad. Sci. U.S.A. (1990) 87:7732-7736 Identification of three related human GRO genes encoding
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Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #authors Tekamp-Olson, P.; Gallegos, C.; Bauer, D.; McClain, J.; Sherry, B.; Fabre, M.; van Deventer, S.; Cerami, A.
J. Exp. Med. (1990) 172:911-919
#title Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues.
  #domain signal sequence #status predicted #label SIG\
#product GRO-gamma #status experimental #label MAT
#length 107 #molecular-weight 11342 #checksum 2559
                                                                                                                                                                                                                                                                                                                             macrophage inflammatory protein 2 alpha precursor - human gro-beta; growth regulated protein beta; melanoma growth-stimulatory activity; monocyte adherence-induced
                                                                                                                                                                                                                                                                                                                                                                                                                #formal_name Homo sapiens #common_name man
30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change
31-Oct-1997
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                                                                                           DB 2; Length 107;
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##cross-references GB:M36820; NID:g183628; PID:g183629
NCE A60407
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##molecule_type mRNA
##ross_references GB:X53799; NID:g34658; PID:g34659
##cross_references GB:X53799; NID:g34658; PID:g34659
##cross_references GB:X53799; NID:g3658; PID:g34659
                                                                                         Query Match 100.0%; Score 86; DB 2; Lv
Best Local Similarity 100.0%; Pred. No. 2.01e-08;
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growth-regulated protein precursor - Chinese hamster
#formal_name Cricetulus griseus #common_name Chinese hamster
30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change
20-Mar-1998
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Expression of macrophage inflammatory protein-2 and KC mRNA in pulmonary inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ##TESIGUES 1-101 ##label ANI ##cross-references GB:J03560; NID:g191088; PID:g304509 ##note the authors translated the codon CAG for residue 52 as
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#product growth-regulated protein #status predicted
#label MAT
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#formal_name Rattus sp. #common_name rat
02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change
23-Feb-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match

84.9%; Score 73; DB 2; Length 101;
Best Local Similarity 81.8%; Pred. No. 3.95e-05;
Matches 9; Conservative 1; Mismatches 1; Indels
  Length 107;
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                                                      0; Indels
  Score 79; DB 2; L. Pred. No. 1.26e-06;
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Best Local Similarity 72.7%;
Matches 8; Conservative
Query Match
Best Local Similarity 100.0%;
Matches 11; Conservative
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                                                                                                          83 KACLNPASPMV 93
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Watanabe, K.; Konishi, K.; Fujioka, M.; Kinoshita, S.;
Nakagawa, H.
J. Biol. Chem. (1989) 264:19559-19563
The neutrophil chemoattractant produced by the rat kidney
epithelioid cell line NRK-52E is a protein related to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##residues 1-32,'S',34-96 ##label HUA
##cross-references GB.M86386
##exposimental_source alveolar macrophage
##enote the authors translated the codon AGT for residue 33 as
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FEBS Lett. (1994) 354:207-212
The three dimensional structure of rat cytokine CINC/Gro in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda, T.; Komorita, N.; Watanabe, K.; Miyai, H. Biochem. Pharmacol. (1993) 45:1425-1430.

Production of an interleukin-8-like chemokine by cytokine-stimulated rat NRK-49F fibroblasts and its
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##residues 25-57 ##label NAK
##experimental_source kidney, NRK-49F fibroblasts
##mote sequence extracted from NCBI backbone (NCBIP:129132)
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                                                                                                                                                                                                                                                                                                                        #authors Konishi, K.; Takata, Y.; Yamamoto, M.; Yomogida, Watanabe, K.; Tsurufuji, S.; Fujioka, M. Gene (1993) 126:285-286
#title Structure of the gene encoding rat neutrophil chemo-attractant Gro.
#cross-references MUID:93246259
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##molecule_type protein
##residues 25-57 ##label NA2
##experimental_source kidney, NRK-49F fibroblasts
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                                                                                                                                 #type complete
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##residues 25-96 ##label WAT
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#cross-references MUID:90062049
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                      2 ACLNPASPMVQ 12
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39 ACLDPEAPMVQ
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#domain signal sequence #status predicted #label SIG\
#product neutrophil chemo-attractant Gro protein #status
experimental #label CYT
3th 96 #molecular-weight 10249 #checksum 5749
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Nucleic Acids Res. (1990) 18:6453
Nucleotide sequence of the human melanoma growth stimulatory
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      melanoma growth-stimulatory activity precursor - human fibroblast-derived neutrophil-activating protein gamma; GRO-alpha; growth regulated protein; MGSA; NAP-3 melanoma
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#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84:7188-7192
#title Constitutive overexpression of a growth-regulated gene in transformed Chinese hamster and human cells.
#cross-references MUID:88041072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #formal_name_Homo sapiens #common_name man
30-Jun-1989 #text_change
08-Sep-1997
813669; A28414; S00983; B60401; S03976; A47626; B46519
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    melanoma growth stimulatory activity, a growth factor
    structurally related to beta-thromboglobulin.
#cross.references MUID:88328991
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                                       annotation; conformation by (1)H-NMR, residues 25-96
                                                                                                                           for neutrophils and
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Pred. No. 1.22e-04;
2; Mismatches 1; Indels
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##cross-references GB:J03561; NID:g183622; PID:g306806
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24/1; 65/2; 92/2
#superfamily beta-thromboglobulin
solution by homonuclear 3D NMR
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EMBO J. (1988) 7:2025-2033
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                                                                                                                                                                                                                                                     cytokine; disulfide bond
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#cross-references MUID:91057157
#accession
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                   #cross-references MUID:95046335
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##molecule_type DNA
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Similarity 72.7%;
8; Conservative
                                                                               ##molecule_type protein
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Best Local Similarity
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#authors Proost, P.; De Wolf-Peeters, C.; Conings, R.; Opdenakker, G.; #authors Proost, P.; Van Damme, J.
#journal J. Immunol. (1993) 150:1000-1010
#title (GCP-2) from human tumor cells. In vitro and in vivo comparison with natural forms of GRO, IP-10, and IL-8.
#cross-references MUID:93139489
#accession B46519
                                                                                                                                                                                                                                                                  Golds, E.E.; Mason, P.; Nyirkos, P.
Biochem. J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion of gro
protein and a neutrophil chemotactic factor but not
beta-2-microglobulin in human synovial cells and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schroeder, J.M.; Persoon, N.L.M.; Christophers, E. J. Exp. Med. (1990) 171:1091-1100
Lipopolysaccharide-stimulated human monocytes secrete, apart from neutrophil-activating peptide l/interleukin 8, a second neutrophil-activating protein. NH-2-terminal amino acid sequence identity with melanoma growth stimulatory
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#product melanoma growth-stimulatory activity #status
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##residues 35-63,'X',65 ##label SC2
##experimental source LPS-stimulated monocytes
NCE A46519
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#cross-references MUID:89246368
#accession S03976
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Best Local Similarity 90.9%;
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##molecule_type protein
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#authors Ryseck, R.P.; MacDonald-Bravo, H.; Mattei, M.G.; Bravo, R. #journal Exp. Cell Res. (1989) 180:266-275
#title Cloning and sequence of a secretory protein induced by growth factors in mouse fibroblasts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R.; Stiles, C.D.
J. Biol. Chem. (1989) 264:4133-4137
The platelet derived growth factor-inducible KC gene encodes
a secretory protein related to platelet alpha-granule
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gro-alpha precursor - mouse
gro-alpha precursor - mouse
growth-stimulating activity factor; melanoma mitogenic
growth-stimulating activity factor; melanoma mitogenic
protein; secretory protein N51
#formal_name Mus musculus #common_name house mouse
20.oct-1989 #sequence_revision 20.oct-1989 #text_change
                                                                                                                                                                                                                                                   #authors Wolpe, S.D.; Sherry, B.; Juers, D.; Davatelis, G.; Yurt, R.W.; Cerami, A.
#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:612-616
#title Identification and characterization of macrophage inflammatory protein 2.
#cross-references MUID:89098980
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##molecule_type mRNA
##molecule_type nRNA
##residues
##residues
##residues 1-96 ##label RYS
##mENT This price is basic and lacks threonine, phenylalanine, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #product macrophage inflammatory protein 2 #status
experimental #label MAT
#length 100 #molecular-weight 10621 #checksum 8720
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NCE JH0081
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:NCE A32190
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Best Local Similarity 58.3%;
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##molecule_type protein
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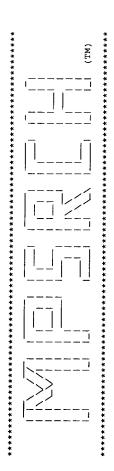
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Feng, L.; Xia, Y.; Yoshimura, T.; Wilson, C.B.
J. Clin. Invest. (1995) 95:1009-1017
Modulation of neutrophil influx in glomerulonephritis in the
rat with anti-macrophage inflammatory protein-2 (MIP-2)
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#journal Am. J. Pathol. (1992) 141:981-988
#title Expression of macrophage inflammatory protein-2 and KC mRNA
in pulmonary inflammation.
#cross-references MUID:93035653
                                                           #domain signal sequence #status predicted #label SIG\
#product gro-alpha #status predicted #label MAT
#length 96 #molecular-weight 10254 #checksum 5052
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macrophage inflammatory protein-2 - rat
#formal_name Rattus sp. #common_name rat
26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change
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##residues 1-100 ##label RES
##cross-references GB:S77604; NID:9998406; PID:9998407
FICATION #superfamily beta-thromboglobulin
RICATION #length 100 #molecular-weight 10783 #checksum
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Pred. No. 1.61e-02;
2; Mismatches 1; Indels
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Pred. No. 5.59e-03;
3; Mismatches 1;
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Pred. No. 1.61e-02;
2; Mismatches 1;
    #superfamily beta-thromboglobulin extracellular protein
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larity 63.6%;
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Similarity 70.0%;
7; Conservative
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Best Local Similarity 70.0%;
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78 CLNPEAPLVQ 87

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Jacks, T.; Townsley, K.; Varmus, H.E.; Majors, J.
Proc. Natl. Acad. Sci. U.S.A. (1987) 84:4298-4302
Two efficient ribosomal frameshifting events are required for
synthesis of mouse mammary tumor virus gag-related
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ## status preliminary
## molecule_type protein
## molecule_type protein
## residues 32-45 ## label NAK
## experimental_source kiney, NRK-49F fibroblasts
## note sequence extracted from NCBI backbone (NCBIP:129129)
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 100 #molecular-weight 10783 #checksum 709
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  (fragment)
                                             macrophage inflammatory protein 2 - rat
ohemoattractant P-1
#formal_name Rattus norvegicus #common_name Norway rat
20-Feb-1995_#sequence_revision 20-Feb-1995 #text_change
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30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
29-Jan-1999
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                                                                                                                                                                                    Driscoll, K.
submitted to the EMBL Data Library, April 1992
$21467
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##residues 1-233 ##label JAC
##cross-references GB:M16766; NID:9332107; PID:9332108
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Best Local Similarity 41.7%; Pred. No. 1.52e+00;
                            #type complete
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Local Similarity 70.0%;
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                                                                                                                                                                                                                                                                                                                         #authors Moore, R.; Dixon, M.; Smith, R.; Peters, G.; Dickson, C.
#journal J. Virol. (1987) 61:480-490
#title Complete nucleotide sequence of a milk-transmitted mouse mammary tumor virus: two frameshift suppression events are required for translation of gag and pol.
#cross-references MUID:87112944
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Makita, N.; Funk, C.D.; Imai, E.; Hoover, R.L.; Badr, K.F.
FEBS Lett. (1992) 299:273-277
Molecular cloning and functional expression of rat
leukotriene A(4) hydrolase using the polymerase chain
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#formal_name Rattus norvegicus #common_name Norway rat
22.Nov-1993 #sequence_revision 10-Nov-1995 #text_change
29-Jan-1999
      Gaps
                                                                                                                                                                           FOMVMM #type complete gag polyprotein - mouse mammary tumor virus gag polyprotein - mouse mammary tumor virus, MMTV #formal_name mouse mammary tumor virus, MMTV 31-Mar-1989 #sequence_revision 31-Mar-1989 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #superfamily mouse mammary tumor virus gag polyprotein
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##residues_type mRNA
##coss-references GB:S0752; NID:q247155; PID:q247156
CLASSIFICATION #superfamily leukotriene-A4 hydrolase
KEYWORDS #length 610 #molecular-weight 69175 #checksum 9336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              core protein; DNA binding; polyprotein
#length 591 #molecular-weight 66269 #checksum 4227
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ##molecule_type DNA
##molecule_type DNA
##residues 1-591 ##label MOO
##cross-references EMBL:M15122; NID:g332127; PID:g332130
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platelet basic protein - pig
#formal_name Sus scrofa domestica #common_name domestic pig
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
                                                                                                                                                 #authors Power, C.A.; Proudfoot, A.E.I.; Magnenat, E.; Bacon, K.B.; Wells, T.N.C. #journal Eur. J. Biochem. (1994) 221:713-719 #title Molecular cloning and characterisation of a neutrophil chemotactic protein from porcine platelets. #cross-references MuID:94229068 #accession $43460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           ##cross_references EMBL:X77935; NID:q457753; PID:q457754
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 119 #molecular-weight 12615 #checksum 9198
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                                                                                                                                                                                                                                                                                                                                                                                             ##molecule_type mRNA
##residues 1-119 ##label POW
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S43460
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Fri Feb 4 18:13:45 2000; MasPar time 3.51 Seconds 72.629 Million cell updates/sec Run on:

Tabular output not generated.

>US-09-150-813-74 (1-12) from US09150813.pep 86

1 KACLNPASPMVQ 12 Title: Description: Perfect Score: Sequence:

PAM 150 Gap 15 Scoring table:

170751 seqs, 21266608 residues Searched:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database:

| ipart1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part10 11:part115 16:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 39:part39 35:part33 35:part39 39:part39 39:part39 a-geneseq35

Mean 16.868; Variance 48.677; scale 0.347 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Score		° Query Match Length DB	DB	ΙD	Description	Pred. No.
	6 100.0	73	39	W81500	Human mature gro-gamm	3 480-03
8	6 100.0	73	25	W18026	Human chemokine gro g	3 486-03
æ	6 100.0	73	23	W12434	Chimeric interlenkin-	3 486-03
8	6 100.0	73	17	R93194	Protein used to gener	3.486-03
8	6 100.0	73	7	R36772	MIP-2beta.	3.486-03
8	6 100.0	73	12	R66700	Human gro-gamma chemo	3.486-03
8	6 100.0		24	W17672	Human chemokine gro g	3.486-03
æ	6 100.0	106	4	R23035	Human Gro damma cytok	3.48e-03
8	6 100.0		4	R20530	Human macrophage infl	3.480-03
8	6 100.0		4	R20590	Human macrophage infl	3.48e-03
æ			13	R70794	Gro-gamma/MIP-2-beta	3.486-03
7		73	39	W81499	human gro-beta polyne	2 65e-02
7	79 91.9	73	12	R66699	Human gro-beta chemok	2 65e-02
7		73	24	W17671	Human chemokine gro b	2.650-02
^	79 91.9	73	25	W18025	Human chemokine gro b	2.656-02
7	9 91.9	73	7	R36771	MIP-2alpha	2 65e-02

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Gaps ; 0

Score 86; DB 39; Length 73; Pred. No. 3.48e-03; 0; Mismatches 0; Indels

Query Match 100.0%; Best Local Similarity 100.0%; Matches 12; Conservative

49 kaclnpaspmvq 60

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Gro-beta/MIP-2-alpha. Human macrophage infl Human macrophage infl Human macrophage infl Chimeric interleukin- Cytokine and neutroph Chemokine-like proteil Human ofnemokine gro a Human gro-alpha chemo Human chemokine gro a Chemokine-like proteil Murine macrophage infl Murine macrophage infl Murine chemokine KG. Murine chemokine KG. Murine chemokine KG. Murine chemokine Go Hutive Gomain from me Putative Gomain from me Putat	WB1500 standard; Protein; 73 AA. WB1500 1. MAR-1999 (first entry) Human mature gro-gamma polypeptide used to treat sepsis. Gro-gamma; chemokine; human; sepsis; septic shock; therapy. Homo sapiens. Location/Qualifiers Frotein WO9848828-A1. 05-NOV-1998. 29-APR-1997; US-846966. (SMIK) SMITHILIB EBECHAM CORP. Demarsh PL, Johanson KO; WPI: 99-024031/02. Treating and preventing sepsis in animals - by using two modified gro b chemokines in conjunction with an anti-infective agent Example 1; Page 19; 26pp; English. Treating and preventing sepsis in animals - by using two modified gro b chemokines in conjunction with an anti-infective agent This is the amino acid sequence of the human gro-gamma chemokines and treating sepsis using chemokines selected from mature or modified murine KC (see W81499) or for-gamma (see W81499) or for-gamma (see W81499) or gro-beta (see W81499) or gro-gamma (see W81499) or gro-gamma comprises amino acids 5-73 of the mature polypeptide. Claimed method uses a dimer composed of 2 modified gro-beta (see W81499) or gro-gamma comprises amino acids 5-73 of the mature polypeptide. Claimed method uses a dimer composed of 2 modified gro-beta (see W81499) or gro-gamma (see W81499). The modified gro-gamma comprises amino acids 5-73 of the mature polypeptide. Claimed method uses a dimer composed of 2 modified gro-beta chemokines. Further claimed is administering the chemokines descrit in this invention are required to treat and prevent sepsis since antimicrobial agents alone have failed to abrogate septic mortalis sequence 73 AA;
R70793 R23034 R205289 M12436 R9980077 R9980077 R107028 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R707318 R70803	ALIGNMENTS entry) mma polypeptide us e) human; sepsis; ation/Qualifiers 73 te modified frag method of the method of the SECHAM CORP. 110 26pp; English. 1110 sepsis in ani conjunction with 26pp; English. 1111 sequence of th 111 sequence of th 112 sequence of th 113 sequence of th 114 sequence of th 115
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00000000000000000000000000000000000000	standard; Protei 1999 (first ent ature gro-gamma ma; chemokine; h piens. Locatio 5.73 /note= 1998; U08742. 1997; US-846966. SMITHKLINE BEEC PL, Johanson KO 0-024031/02. 197 us-846966. The amino acid penokines in con 1; Page 19; 26p the amino acid penokines in con 1; Page 19; 26p plypeptide. Not 1; Page 19; 26p polypeptide. See W81499; o ma comprises amin method uses a d man comprises amin
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	ID W81500 standard; Protein; W81500 standard; Protein; DI W81500; DI WAR-1999 (first entry) E Human mature gro-gamma pook M Gro-gamma; chemokine; hummos sapiens. Location/FT Protein 5.73 FT Protein 5.73 FT W09848828-A1. PN W09848828-A1. PN W0984828-A1. PN W09849828-A1. PN W098498-A1. PN W098498-A1. PN W098499-A1. PN W09849-A1. PN W0984
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chimeric interleukin-8 réceptor binding polypeptide G18132G. Chimeric; IL-8; receptor mediated biological response; inhibition; signal transduction; chemokine; human.
                                                                                                                                                                                                                                          West of chemokines) such as KC and gro-alpha - to treat or prevent sepsis, particularly septic shock claim, 1; Page 19-20; 28pp. English.

A claimed method of treating or preventing sepsis comprises administering to an animal an effective amount of a chemokine selected from mature murine KC (see W18023), human gro alpha (see W18024), human gro beta (see W18025) and human gro plapa (see modified fragments of these chemokines and multimeric proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Amino acids 18 to 32 of SEQ ID NO:1 in the specification from human interleukin-8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Amino acids 34 to 73 of SEQ ID NO:2 in the specification from GRO-gamma"
                                                                                                                                                                                                                                                                                                                                      comprising an association of two chemokine proteins. Sepsis can occur in hospitalised patients, and a consequence of bacterial sepsis septic shock. The method of the invention provides a treatment for sepsis, particularly septic shock, which is a major cause of death in intensive care units. Septic shock syndrome apparently has intractable resistance to the effects of a variety
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "Amino acids 1 to 18 of SEQ ID NO:2 in the specification from GRO-gamma"
                                                                                                                                                                                                                                                                                                                                                                                                          of highly potent antimicrobial agents. Survival is increased by treatment with the chemokines, both prophylactically and after
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                           Sepsis; septic shock; therapy; gro gamma; chemokine; human.
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                                                                                                                                        /note= "preferred modified fragment of KC
(Claim 5)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                 Location/Qualifiers
                                                                                                                                                                                    20-NOV-1996; U18616.
21-NOV-1995; US-007425.
(SMIX) SMITHKLINE BEECHAM CORP.
DEMATSH PL. JOHANSON KO:
WPI: 97-298111/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W12434 standard; peptide; 73 AA.
                                   T 2
W18026 standard; protein; 73 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.08;
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                                                                    30-JAN-1998 (first entry)
Human chemokine gro gamma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chimeric-Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  49 kaclnpaspmvq 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KACLNPASPMVQ 12
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  1 KACLNPASPMVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                              73 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-APR-1996; 120-JUN-1995; 127-JUN-1995; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9700893-A1.
                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-JAN-1997.
18-JUN-1996;
                                                                                                                                                                WO9719173-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                  infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                               Protein
                                                           W18026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      region
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                                    RESULT
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Interleukin-8 receptor 1 specific binding domain peptide(s) - used to modulate IL-8R1 mediated biological response

To modulate IL-8R1 mediated biological response

Example 3: Page 42: 51pp; English.

Example 3: Page 42: 51pp; English.

CC fris is the amino acid sequence of a protein (not designated in this specification but thought to be GRO(gamma), an agonist of the human interleukin (IL)-8 receptor type R2 (see W092/00326). The protein was used to generate GRO(gamma)/IL-8R1 binding domain chimaeras by replacing selected residues from the GRO(gamma) protein with corresp. residues from IL-8R binding peptide with residues from the specific comprising an IL-8R2 binding peptide with residues from the specific binding domain for the IL-8 receptor type R1. These domains are found in the amino-terminal loop and strand 3 of the 3 stranded anti-parallel continues in the amino-terminal loop and strand 3 of the 3 stranded anti-parallel continues IL-8 are important for binding to the IL-8 R1 receptor.

CC (reduce or enhance) IL-8 binding to the R1 receptor.

CC (reduce or enhance) IL-8 binding to the R1 receptor.

CC (reduce or enhance) IL-8 binding to the R1 receptor.

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CC (reduce or enhance) IL-8 binding to the R1 receptor.

CC (reduce or enhance) IL-8 binding to the R1 receptor.
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Protein used to generate IL-8/Gro(gamma) chimeric peptides.
Native; human; interleukin-8; specific binding domain; receptor;
amino-terminal loop; anti-parallel; beta-sheet; Greek key; substitution;
insertion; deletion; reduction; enhancement; chemo-attractant;
neutrophil; modulation; biological response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
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                       Wernette-Hammond ME;
                                                                                                                                                                                                                                                                 The present sequence represents a specifically claimed chimeric polypeptide (1813cG derived from human interleukin-8 (IL-8) and GRO-gamma. This polypeptide and similar examples of chimeric chemokines (146531 and 118646153G) also derived from human IL-8 and GRO-gamma, exhibit a chemokine protein structure capable of ILBR1 or ILBR2 binding. They can be used for modulating IL8 receptor-mediated biological responses. In particularly, they can be used for inhibiting IL8 receptor signal transduction.

N.B. The present sequence is not shown in the specification but is derived from SEQ ID NO:1 and 2, see features table.
                                                                                                              for modulating IL-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                              New chimeric interleukin-8 polypeptide(s) - used for modulatin
receptor-mediated biological responses, e.g. inhibiting signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 86; DB 17; Length /3;
Pred. No. 3.48e-03;
"...matches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 86; DB 23; Length 73; Pred. No. 3.48e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Venkatakrishna S, Wernette-Hammond ME;
Blaney J, Shyamala V, Siani M, Tekamp-Olson P,
WPI; 97-087324/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R93194 standard; protein; 73 AA.
                                                                                                                                                                                                                                               Claim 26; Page -; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0%;
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20-JUN-1995; U07895.
20-JUN-1994; US-262990.
(CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49 kaclnpaspmvq 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
WO9535376-A2.
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                                                                                                                                                                                                                                                              Suppression of megakaryocytopolesis - by administration of macrophage inflammatory protein-1 or -2 pisclosure; Page 18; 26pp: English.

A claimed method for reducing the no. of circulating platelets in the bloodstream of a mammal comprises admin. of MIP-1 and/or MIP-2 or their analogues to induce such a reduction. The MIP-1 indp-2 or analogue may be operatively linked to a carrier. The MIP-2 or used to inhibit megakaryocytopolesis to effect in vivo reduction of platelet nos. They can be used to treat disorders with excessively high platelet counts such as thrombocytosis, stroke, pulmonary emboliand myeloproliferative disorders.
                                                                            Macrophage inflammatory protein; megakaryocytopoiesis; MIP-1; MIP-2; thrombocythemia; reactive thrombocytosis; stroke; emboli; platelet; myeloproliferative disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New truncated chemokine with increased biological activity - and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human gro-gamma chemokine,
Gro-alpha protein, chemokine, inflammation; antiinflammatory;
hematopoietic synergistic factor; HSF; hematopoietic precursor;
bone marrow, intercrine, desamino gro-gamma; truncation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, Page 52; 89pp; English.
Truncated, desamino chemokine comprising amino acids 5-73 of human mature gro-gamma (full sequence given in R66700) shows enhanced biological activity when compared to the mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "desamino truncated gro-gamma, claim 10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            related multimers, nucleic acid, antibodies etc., for treating inflammation, stimulating growth of bone marrow etc., also peptide(s) for inducing haematopoietic synergistic factor.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein, and has been used to prepare multimeric, modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 86; DB 7; Length 73; Pred. No. 3.48e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pelus LM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R66700 standard; protein; 73 AA
r 5
R36772 standard; protein; 73 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-1995 (first entry)
                                                                                                                                                                  27-MAY-1993.
13-NOV-1992; U09671.
15-NOV-1991; US-792988.
(UYPE-) UNIV PENNSYLVANIA.
                                                29-SEP-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        page 69"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-DEC-1994.
03-JUN-1994; U06264.
08-JUN-1993; US-073800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49 kaclnpaspmvq 60
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                                                                                                                                                                                                                                                    WPI; 93-182239/22.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                   Homo sapiens.
WO9309799-A.
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                                                                                                                                                                                                                                         Gewirtz AM;
                                                                 MIP-2beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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 RESULT
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DB 12; Length 73;

100.0%; Score 86;

Query Match

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Treating myelosuppression or any condition involving treating myelosuppression or any condition involving treating myelosuppression or any condition involving treating myelosuppression or low levels of haematopoietic cells profit manusuppression or low levels of haematopoietic cells profit page 21; 31pp; English.

C. This polypeptide sequence comprises human gro gamma. Use of mammalian chemokines selected from gro alpha (W17670), gro beta c. (W17671), gro gamma or KC (W17669) for mobilising haematopoietic cells is claimed. The chemokines, optionally used together with a c. or low levels of haematopoietic regulator, are used to treat myelopoietic or any condition that involves immunosuppression or any condition that involves immunosuppression or low levels of haematopoietic cells, e.g. infection, cancer, myelopoietic of bone marrow cells. A claimed application of or autoimmune disease, or low production/differentiation of cor autoimmune disease, or low production/differentiation of cor autoimmune disease, or low production/differentiation of corputherapy. Chemokines having an N-terminal deletion are more certive, e.g. by 2 orders of magnitude, than the full-length protein. When used with a colony stimulating factor (CSF), a synergistic creduced. Compared with conventional methods of stem cell transplants, cueduced. Compared with conventional methods of stem cell transplants. Or peripheral blood mononnelear cells and/or nia*release of corputer of sections of stem cell transplants and colony stimulating and more rapid release of copy peripheral blood mononnelear cells and/or nia*release of copy and cells and/or nia*release of copy and cells and/or nia*release of copy and cells and/or nia*release of cells and/or nia*release of copy and cells and/or nia*release of cells and/or nia*release of cells cells and cells and/or nia*release of cells cells cells and cells cells and cells cells and cells cells and cells 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                         Gaps
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0
                                                                                                                                                                                                                                                                         Human chemokine gro gamma.
Gro gamma: chemokine, intercrine; myelosuppression;
immunosuppression; haematopoietic cell; infection; cancer;
aplastic anaemia; autoimmune disease; stem cell transplant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score bo; L. Pred. No. 3.48e-03;
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Cytokine; inflammatory response; MAD-2; cancer diagnosis; colonic epithelial tumour cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 86; DB 24; Length 73;
                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "preferred polypeptide (Claim 4)"
    Pred. No. 3.48e-03;
                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers 1..34
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R23035 standard; Protein; 106 AA.
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W17672 standard; Protein; 73 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMIK ) SMITHKLINE BEECHAM CORP.
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Best Local Similarity 100.0%;
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Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-547262.
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                                                                                             1 KACLNPASPMVQ 12
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24-OCT-1996; U17074.
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                                                                      49 kaclnpaspmvq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          King AG, Pelus
WPI: 97-258957/
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                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-OCT-1995;
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Best Local Similarity 100.0%;

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                                                                                                                                                                                                drough and Gro gamma inflammatory cytokine(s) - for use in diagnosing colon cancer. Claim 25; Fig 1B; 46pp; English.

The cDNA clone coding for inflammatory cytokine Gro-gamma was stoolated from a mezerin- and calcium lonophore-stimulated leukocyte CDNA library. The amino acid sequence of Gro gamma was deduced from the nucleotide sequence. The level of Gro gamma in inflammatory response cells can be used as an indication of a test substance's inflammatory activity and to diagnose certain cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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The sequence was deduced from the DNA obtd by screening the U937 CDNA library prepd. from poly-4+ RNA from PNA treated and LPS stimulated cells, using as probe a fragment isolated from the mMIP-2 cDNA (see 020728) encoding most of the mature mMIP-2 amino acid sequence. Two classes of human cDNA homologues to mMIP-2 were found designated alpha and beta. The alpha form (Q20729) is well aim W0920032; the beta form reproduced here is claimed in W09200326. The alpha form is the more abundant of the two. The genes can be used to produce recombinant MIP proteins for use in world healing, to modulate myelopoiesis and to induce adjuvant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human macrophage inflammatory protein 2-beta - for treating infections, cancer, myelopoietic dysfunction and auto:
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                                                                                                                                                                                                                                                                                                                                                                                           Score 86; DB 4; Length 106; Pred. No. 3.48e-03;
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Human macrophage inflammatory protein (MIP) 2 beta.
Inducible; secretory; inflammatory response; cytokine.
                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                              35..106
/label= Gro_gamma
 /label= signal
/note= "putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AT 9
R20530 standard; Protein; 107 AA.
                                                                                                                     (CETU ) CETUS CORP.
(UTNC-) UNIV OF NORTH CAROLINA.
Hasklil JS, Nitecki DE, Ralph P;
WPI; 92-15088/18.
N-PSDB; 024267.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                See also R20528,29 and R20588-90.
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/label= signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-JAN-1992.
24-JUN-1991; U04482.
22-JUN-1991; US-541897.
19-JUN-1991; US-715194.
(CHIR-) CHIRON CORP.
Tekamp-Olson P, Gallegos CA;
WPI: 92-041518/05.
                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 12; Conservative
                                                                                         U06936.
US-590223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     82 kaclnpaspmvq 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 KACLNPASPMVQ 12
                                                                                                                                                                                                                                                                                                                                                            106 AA;
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                                                                                         24-SEP-1991;
28-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                        WO9206196-A
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                                                                                                                                                                                                                                                                                                                                                              Sequence
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100.0%; Score 86; DB 4; Length 107;

Query Match

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Gaps
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See also R20588, 89 and R20528-30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 86; DB 4; Length 107;
Pred. No. 3.48e-03;
0; Mismatches 0; Indels
                                  Indels
                                                                                                                                                                                                                                                                                                                      23-ApR-1992 (first entry)
Human macrophage inflammatory protein (MIP) 2 beta.
Inducible; secretory; inflammatory response; cytokine.
Homo saplens.
Pred. No. 3.48e-03;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                 R20590 standard; Protein; 107 AA.
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R70794 standard; Protein; 107 AA.
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/label= signal
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WPI; 92-041518/05.
N-PSDB; Q20614.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%;
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WPI; 95-082239/11.
N-PSDB; Q85364.
                         12; Conservative
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22-JUN-1990; US-541898.
19-JUN-1991; US-715195.
(CHIR-) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                 83 kaclnpaspmvq 94
                                                                                                                                          1 KACLNPASPMVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immune diseases
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WO9504158-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide
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                                                                                                                                                                                                                                                  Gaps
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             potentially useful for treating arthrifts, restenosis, cancer. Claim 12; Page 41-42; 60pp; English.

Claim 12; Page 41-42; 60pp; English.

Burlified heparamases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukcytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced Sequence 107 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating and preventing sepsis in animals - by using two modified grob behankines in conjunction with an anti-infective agent Example 1; Page 18; 26pp; English.

This is the amino acid sequence of the human chemokine gro-beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chemokines described in this invention are required to treat and prevent sepsis since antimicrobial agents alone have failed to shorogate septic mortality.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gro-alpha protein; chemokine; inflammation; antiinflammatory; hematopoietic synergistic factor; HSF; hematopoietic precursor; bone marrow; intercrine; desamino gro-beta; truncation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-1999 (first entry) human gro-beta polypeptide used to treat sepsis. Gro-beta; chemokine; human; sepsis; septic shock; therapy.
                                                                                                                                                                                                          DB 13; Length 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 79; DB 39; Leuy....Pred. No. 2.65e-02;
                                                                                                                                                                                                Score 86; DB 13; Leugu... -
Pred. No. 3.48e-03;
inhibition of heparin or heparan sulphate degradation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "claimed fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R66699 standard; protein; 73 AA.
                                                                                                                                                                                                                                                                                                                                                                                                   W81499 standard; Protein; 73 AA
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Local Similarity 100.0%;
nes 11; Conservative
                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                12; Conservative
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                                                                                                                                                                                                                                                                                      83 kaclnpaspmvq 94
                                                                                                                                                                                                                                                                                                                         1 KACLNPASPMVQ 12
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King AC, Pelus IM.

WHI: 97-289557/23.

WHI: 97-289557/23.

WHI: 97-289557/23.

Treating myelosuppression or any condition involving treating myelosuppression or low levels of haematopoietic cells immunosuppression or low levels of haematopoietic cells.

This polypeptide sequence comprises human gro beta. Use of mammalian chemokines selected from gro alpha (W17670, gro beta, gro damma (W17672) or KC (W17669) for mobilising haematopoietic cells is claimed. The chemokines, optionally used together with a growth factor or other haematopoietic regulator, are used to treat myelosuppression or any condition that involves immunosuppression or any condition, had involves immunosuppression or any condition, had involves immunosuppression or autoimmune disease, or low production/differentiation of remember or low production/differentiation of peripheral blood stem cell transplants in patients being treated by chemokines having an N-terninal deletion are more chemotherapy. Chemokines having an N-terninal deletion are more consumpated with a colony stimulating factor (CSF), a synergistic effect is achieved and the dose, and side-effects, of CSF can be consumpated with conventional methods of stem cell transplants, use of mammaolian chemokines provides a more rapid release of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                        New truncated chemokine with increased biological activity - and
                                                                                                                                                                                                                                                     related multimers, nucleic acid, antibodies etc., for treating inflammation, stimulating growth of bone marrow etc., also peptide(s) for inducing haematopoietic synergistic factor. Disclosure, Page 51-22, 89pp; English.

Truncated, desamino chemokine comprising amino acids 5-73 of human mature gro-beta (full sequence given in R6669) shows enhanced biological activity when compared to the mature protein, and has been used to prepare multimeric, modified
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                                    /note= "desamino truncated gro-beta, claim 6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75-NOV-1997 (first entry)

Human chemokine gro beta.

Homen chemokine; intercrine; myelosuppression;

immunosuppression; haematopoietic cell; infection; cancer;

aplastic anaemia; autoimmune disease; stem cell transplant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 79; DB 12; Length 73; Pred. No. 2.65e-02; 0; Mismatches 0; Indels
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                                                                                                                                                                                             Pelus LM;
                                                                                                                                                                                           Bhatnagar P, King AG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
Location/Qualifiers
                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W17671 standard; Protein; 73 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 91.9%;
Best Local Similarity 100.0%;
Matches 11; Conservative
                                                          page 68"
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01-MAY-1997.
24-OCT-1996; U17074.
                                                                                                                                                08-JUN-1993; US-073800.
                                                                                                         22-DEC-1994.
03-JUN-1994; U06264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49 kaclnpaspmv 59
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                                                                                                                                                                                           Balcarek JM, Bha
WPI; 95-036402/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 AA;
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                                                                                   WO9429341-A
                                                                                                                                                                                                                                                                                                                                                                                                                                   chemokines.
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                    protein
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TOWART 1997.

TOWART 1995.

TOWART 1997.

TO
peripheral blood mononuclear cells and/or platelets, reducing risk of infection and allowing use of higher doses of chemotherapeutic
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                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-1998 (first entry)

Human chemokine gro beta.

Sepsis; septic shock; therapy; gro beta; chemokine; human.

Homo sapiens.
                                                                                                                           Score 79; DB 24; Length 73;
Pred. No. 2.65e-02;
0; Mismatches 0; Indels
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Pred. No. 2.65e-02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                              JT 15
W18025 standard; protein; 73 AA.
                                                                                                                             / Match 91.9%;
Local Similarity 100.0%;
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Best Local Similarity 100.0%;
Matches 11; Conservative
                                                                                                                                                                                   11; Conservative
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                                                                                Sequence
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